



Thursday, October 24, 2001

Joe Dombrowski
Remedial Project Management Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East, Box 19276
Springfield, Illinois 62794-9276

2824 Hitchcock Ave.

Re: Request for Information to assist in the Downers Grove
Groundwater Investigation

Dear Mr. Dombrowski:

Downers Grove

The following is in response to your letter dated October 3, 2001.

1. Steven J. Bales and James Sullivan were consulted in the preparation of the answers to this request.
2. Exhibit A: Land Sale Contract
Exhibit B: Plat of Survey
Exhibit C: Building Prints
Exhibit D: Topographic Plan
Exhibit E: Phase 1 Construction Prints
Exhibit F: Phase 2 Construction Prints
Exhibit G: Isometric Soil and Water Print
Exhibit H: Environmental Permits
Exhibit I: Chromium Emissions Test Report
Exhibit J: Phase 1 Environmental Assessment
Exhibit K: Water Analysis Reports
Exhibit L: Statement of chlorinated materials purchased
3. Sander Sundberg, Ph.D., P.E., our environmental consultant may be able to provide you with additional information.
4. The following persons have knowledge or information regarding generation, transportation, treatment, disposal, or other handling of hazardous substances at our facility:

RE

OCT 29 2001

E

Illinois 60515

(630) 852-4665

Fax (630) 852-4687

Steven J. Bales, President/Owner, Bales Mold Service, Inc.
Jim Sullivan, General Manager, Bales Mold Service, Inc.
Michael Bales, Previous Partner, Bales Mold Service, Inc.
Robert Nulph, President, Source One Environmental Services

BALES
MOLD SERVICE INC.



5. At Bales Mold Service, Inc., we provide mold coatings to the plastics industries. We purchase, receive and inventory raw materials for our processes. The materials are used to make-up and run several plating baths in a 0% discharge, closed loop system. The waste material is treated and disposed of through a licensed waste hauler.

2824 Hitchcock Ave.

6. We purchased the land at 2824 Hitchcock Avenue on March 15, 1984 as shown on the enclosed land sale contract, exhibit A.

7. a) Property boundaries, including a written legal description, are shown on the enclosed plat of survey, exhibit B.

b) The location of underground utilities, including telephone, electrical, sewer, water main, etc., are shown on the enclosed print, exhibit C.

Downers Grove

c) All surface structures are shown on the enclosed building print, exhibit C.

d) Ground water wells, including drilling logs, are shown on the enclosed topographic plan, exhibit D. The highlighted area shows a pre-existing water well that was capped by DuPage County before the construction of our building began.

Illinois 60515

e) The storm water drainage system, sanitary sewer system, and other underground structures are shown on the enclosed print, exhibit C.

(630) 852-4665

f) Bales Mold Service, Inc. was built in two phases. Phase 1 is shown on the enclosed print, exhibit E. Phase 2 is shown on the enclosed print, exhibit F. At this time, there are no further plans for expansion.

g) All maps and drawings of the facility in my possession are enclosed, exhibits B – G.

Fax (630) 852-4687

8. We do not have any solid waste management units on our property.

9. Larry Penn was the previous owner of the residential land that is now occupied as industrial by Bales Mold Service as shown on the enclosed land sale contract, exhibit A. No further information is available to us about the previous owner.

10. Please see above.



2824 Hitchcock Ave.

Downers Grove

Illinois 60515

(630) 852-4665

Fax (630) 852-4687

11. Copies of local, state and federal environmental permits granted for our facility are enclosed, exhibit H.
12. Reports relating to soil, water, and air quality are enclosed, exhibits I, J, and K.
13. None.
14. None.
15. None.
16. None.
17. None.
18. None.
19. All purchases of chlorinated chemicals are shown on the enclosed statement from our supplier, exhibit L. We purchased a small vapor degreaser in February 2000 that holds approx. 5 gallons of Trichloroethylene. Most of the solvent evaporates and we have not yet completely filled a disposal drum, therefore we have not needed to dispose of any.
20. None.

If you should have any additional requests or are in need of further information, I would be more than happy to assist.

Sincerely,

Steven J. Bales
President

STANDARD VACANT LAND SALES CONTRACT • DuPage Board of Realtors

BY: MICHAEL J. BALES AND STEVEN J. BALES
 753 Springer Dr., Lombard, 60148 County of DuPage State Illinois
 to buy and
 BY: LARRY PENN as tenants in common, and not as joint tenants,
 Downers Grove County of DuPage State Illinois
 to sell and cause to be conveyed in joint tenancy to the Buyer by stamped warranty deed with release of dower and homestead rights as hereinafter
 ded, unless prior to the closing the Buyer indicates in writing a different Guarantee or form of conveyance, the real estate situated in DuPage County,
 is, to wit:

Of the West 1/3 of Lot 20 (except the West 70.0 feet thereof) in A. T. McIntosh and
 Company's First Addition to Belmont, being a subdivision of parts of Sections 1, 2,
 11 and 12, Township 38 North, Range 10, East of the Third Principal Meridian, according
 to the plat thereof recorded August 13, 1919 as document 137824, in DuPage County,
 Illinois.

Exhibit A

2830 Hitchcock Avenue, Downers Grove, Illinois
 tion and side of street
 ox image size 139' X 297'
 erty is zoned Light Industrial in Downers Grove (M-1)

PURCHASE PRICE: \$ 52,000.00
 sh, certified check or bank draft, upon closing unless otherwise arranged between Buyer and Seller by mutual agreement in writing prior to closing.
 EARNEST MONEY: \$ 5,000.00 by cash or Letter of Credit. Cash to be held by Coldwell Banker
 applied upon such sale when consummated. Commercial Real Estate Services, as escrowee, for the mutual benefit
 the parties, in a segregated interest bearing escrow account, paying no less than current*
 SESSION 12:01 A.M.: at closing after sale is closed.
 CLOSING DATE: May 1, 1984 or sooner by agreement. general real
 place designated by Selling Broker and after title has been shown good and merchantable or has been accepted by Buyer, provided deed as aforesaid estate
 then be ready for delivery conveying to said Buyer a good title to the premises, but subject to the following, if any: (1) all taxes and special
 ments levied or confirmed after this date; (2) building restrictions of record and building line, conditions and covenants of record as to use and
 pancy, zoning laws and ordinances; (3) public utilities easements; (4) public and private roads and highways and easements pertaining thereto; (5)
 age ditches, feeders and laterals and easements pertaining thereto.

money market rates, with all interest accruing thereon through closing to inure to the
 benefit of purchasers

which do not prohibit purchasers intended use of the subject property as hereinafter set
 forth

PROVISIONS of Real Estate taxes and other agreed items, if any, shall be to the date of possession.

prations shall be based upon the tax Assessor's latest valuation and the latest known tax rate.

which do not contain a right of reverter or prohibit purchasers intended use of the subject
 property

E: Prior to closing date, Seller shall deliver to Buyer or his agent evidence of merchantable title in Seller as of this date by either a Torrens Special Tax
 h and the Owners' Duplicate Certificate of Title issued by the Registrar of Title, or a Preliminary Report of Title from a Title Company licensed to do
 ss in Illinois, in the amount of purchase price subject only to items listed above and the usual objections contained in such certificates and
 nary reports. If within 10 days of receiving the evidence of title Buyer objects in writing to other defects in title, Seller shall have 60 additional days
 the date of delivery of title evidence to cure such defects and notify Buyer. If this is not done, Buyer may terminate this contract or may elect to take
 with such other defects (with the right to deduct from the purchase price liens and encumbrances of a definite or ascertainable amount) by notifying
 of such election and tendering performance. Unless Buyer makes this election within 10 days after receiving written notice from the Seller of the
 ity of Seller to cure such defects, this contract shall, without further action by either party, become null and void and all monies paid by the Buyer
 be refunded. Seller shall allow reasonable inspection of the premises by the Buyer (and his financing agent) and furnish any pertinent information
 sted by them.

/EY: The Seller shall promptly at his expense furnish the Buyer a plat of survey of current date herewith prepared by a Surveyor licensed by the State
 nois showing the property being sold under this contract with the lot lines being indicated thereon, and further, all corners properly staked, indicating
 ference to known or identifiable monumentation any deviation of the lines of occupation or possession from the boundary lines as described in the
 act. If encroachments of any kind are disclosed by said plat and, if the Seller has not corrected such encroachments within 20 days after the date said
 tendered the Buyer, this contract shall at the Buyer's option become null and void and the Earnest Money Deposit shall be refunded to the Buyer
 his written request. Provided, however, if the Seller has an existing plat showing the information referred to herein above, and no changes have been
 in the lot dimensions or the improvements thereon, the Buyer waives the staking of the lot and accepts the existing plat.

ORMANCE: Time is of the essence of this contract. Should Buyer fail to perform this contract, then at the option of the Seller and upon written
 to the Buyer the earnest money shall be forfeited by the Buyer as partial liquidated damages and the contract shall thereupon become null and void
 e Seller shall have the right to take possession of the premises, and all right in and title to said premises and any and all improvements made
 and premises by the Buyer shall vest in the Seller. All notices required to be given by the terms of this contract shall be in writing signed by or on
 of the party giving the same and served upon the other party or his agent personally or by registered mail. The earnest money shall be held by the
 s Broker for the mutual benefit of the parties concerned and upon the closing of the sale applied first to the payment of any expenses incurred for
 iler in said matter, and second to payment of the Broker's sales commission, rendering the overplus, if any, to the Seller, as liquidated
 damages.

EA agrees that COLDWELL BANKER COMMERCIAL REAL ESTATE SERVICES brought
 this sale and agrees to pay them a Broker's commission in the amount of 10% of the selling price.

ERATING BROKER: NONE

RIDER ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF FOR ADDITIONAL TERMS,
 TENANTS AND CONDITIONS.

March 15 1984

MICHAEL J. BALES

Seller LARRY PENN

Seller

STANDARD VACANT LAND SALES CONTRACT • DuPage Board of Realtors

BUYER: MICHAEL J. BALES AND STEVEN J. BALES
 of 753 Springer Dr., Lombard 60148 County of DuPage State Illinois
 agrees to buy and
 SELLER: LARRY PENN as tenants in common, and not as joint tenants,
 of Downers Grove County of DuPage State Illinois
 agrees to sell and cause to be conveyed in form of warranty deed with release of dower and homestead rights as hereinafter provided, unless prior to the closing the Buyer indicates in writing a different Guarantee or form of conveyance, the real estate situated in DuPage County, Illinois, to wit:

Of the West 1/3 of Lot 20 (except the West 70.0 feet thereof) in A. T. McIntosh and Company's First Addition to Belmont, being a subdivision of parts of Sections 1, 2, 11 and 12, Township 38 North, Range 10, East of the Third Principal Meridian, according to the plat thereof recorded August 13, 1919 as document 137824, in DuPage County, Illinois.

Location and side of street 2830 Hitchcock Avenue, Downers Grove, Illinois
 Approximate size 139' X 297'
 Property is zoned Light Industrial in Downers Grove (M-1)

THE PURCHASE PRICE: \$ 52,000.00
 in cash, certified check or bank draft, upon closing unless otherwise arranged between Buyer and Seller by mutual agreement in writing prior to closing.

THE EARNEST MONEY: \$ 5,000.00 by cash or Letter of Credit, Cash to be held by Coldwell Banker Commercial Real Estate Services, as escrowee, for the mutual benefit of the parties, in a segregated interest bearing escrow account, paying no less than current* after sale is closed.

POSSESSION 12:01 A.M. At closing
 THE CLOSING DATE: May 1, 1984 or sooner by agreement
 at a place designated by Selling Broker and after title has been shown good and merchantable or has been accepted by Buyer, provided deed as aforesaid shall then be ready for delivery conveying to said Buyer a good title to the premises, free of all liens and encumbrances except as follows: (1) all taxes and special assessments levied or confirmed after this date; (2) building restrictions of record and building line, conditions and covenants of record as to use, occupancy, zoning laws and ordinances; (3) public utilities easements; (4) public and private roads and highways and easements pertaining thereto; (5) drainage ditches, feeders and laterals and easements pertaining thereto.

- * money market rates, with all interest accruing thereon through closing to inure to the benefit of purchasers
- ** which do not prohibit purchasers intended use of the subject property as hereinafter set forth

PRORATIONS of Real Estate taxes and other agreed items, if any, shall be to the date of possession.

TAX prorations shall be based upon the tax Assessor's latest valuation and the latest known tax rate.

*** which do not contain a right of reverter or prohibit purchasers intended use of the subject property

TITLE: Prior to closing date, Seller shall deliver to Buyer or his agent evidence of merchantable title in Seller as of this date by either a Torrens Special Tax Search and the Owners' Duplicate Certificate of Title issued by the Registrar of Title, or a Preliminary Report of Title from a Title Company licensed to do business in Illinois, in the amount of purchase price subject only to items listed above and the usual objections contained in such certificates and preliminary reports. If within 10 days of receiving the evidence of title Buyer objects in writing to other defects in title, Seller shall have 60 additional days from the date of delivery of title evidence to cure such defects and notify Buyer. If this is not done, Buyer may terminate this contract or may elect to take title with such other defects (with the right to deduct from the purchase price liens and encumbrances of a definite or ascertainable amount) by notifying Seller of such election and tendering performance. Unless Buyer makes this election within 10 days after receiving written notice from the Seller of the inability of Seller to cure such defects, this contract shall, without further action by either party, become null and void and all monies paid by the Buyer shall be refunded. Seller shall allow reasonable inspection of the premises by the Buyer (and his financing agent) and furnish any pertinent information requested by them.

SURVEY: The Seller shall promptly at his expense furnish the Buyer a plat of survey of current date herewith prepared by a Surveyor licensed by the State of Illinois showing the property being sold under this contract with the lot lines being indicated thereon, and further, all corners properly staked, indicating by reference to known or identifiable monumentation any deviation of the lines of occupation or possession from the boundary lines as described in the contract. If encroachments of any kind are disclosed by said plat and, if the Seller has not corrected such encroachments within 20 days after the date said plat is tendered the Buyer, this contract shall at the Buyer's option become null and void and the Earnest Money Deposit shall be refunded to the Buyer upon his written request. Provided, however, if the Seller has an existing plat showing the information referred to herein above, and no changes have been made in the lot dimensions or the improvements thereon, the Buyer waives the staking of the lot and accepts the existing plat.

PERFORMANCE: Time is of the essence of this contract. Should Buyer fail to perform this contract, then at the option of the Seller and upon written notice to the Buyer the earnest money shall be forfeited by the Buyer as partial liquidated damages and the contract shall thereupon become null and void and the Seller shall have the right to take possession of the premises aforesaid, and all right in and title to said premises and any and all improvements made upon said premises by the Buyer shall vest in the Seller. All notices required to be given by the terms of this contract shall be in writing signed by or on behalf of the party giving the same and served upon the other party or his agent personally or by registered mail. The earnest money shall be held by the Seller's Broker for the mutual benefit of the parties concerned and upon the closing of the sale applied first to the payment of any expenses incurred for the Seller in said matter, and second to payment of the Broker's sales commission, rendering the overplus, if any, to the Seller, as liquidated damages.

SELLER agrees that COLDWELL BANKER COMMERCIAL REAL ESTATE SERVICES brought about this sale and agrees to pay them a Broker's commission in the amount of 10% of the selling price.

COOPERATING BROKER: NONE

SEE RIDER ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF FOR ADDITIONAL TERMS, COVENANTS AND CONDITIONS.

DATE March 15 1984

Buyer MICHAEL J. BALES

Buyer STEVEN J. BALES

Seller LARRY PENN

Seller

RIDER TO STANDARD VACANT LAND SALES CONTRACT, BY AND
BETWEEN MICHAEL J. BALES AND STEVEN J. BALES, PURCHASERS,
AND LARRY PENN, SELLER, RELATING TO THE PREMISES COMMONLY
KNOWN AS 2830 HITCHCOCK AVENUE, DOWNERS GROVE, ILLINOIS

1. It is hereby acknowledged and understood by Seller that Purchasers intention to acquire the subject property is solely for the purposes of constructing a single story (excluding basement) commercial structure thereon, containing approximately 7,000 usable square feet, to be utilized for light manufacturing and warehousing, for no more than three separate users (hereinafter referred to as the "Intended Improvements"). Accordingly, the purchase and closing contemplated hereunder are contingent upon Purchasers obtaining, prior to the intended closing date hereunder:

(a) Satisfactory evidence that the subject property has been duly zoned, rezoned, platted and/or annexed, as the case may be, so as to permit the erection and construction of the Intended Improvements. In this regard; Purchasers agree to fully cooperate with Seller regarding rezoning and/or annexation, if so required;

(b) Satisfactory soil boring, percolation and/or compaction test results, evidencing that the soil and geological condition of the subject property will permit the erection and construction of the Intended Improvements. The cost of said tests shall be borne equally by Purchasers and Seller, up to a maximum cost to Seller of \$600.00;

(c) Satisfactory evidence that gas, electricity, telephone, water, storm and sanitary sewer facilities are currently available at the subject property site in respective capacities

adequate to service the Intended Improvements;

(d) Satisfactory evidence that building, highway access and use permits, and other such governmental required approvals will be issued to Purchasers so as to allow the erection and construction of the Intended Improvements, upon Purchasers adherence to the usual and customary governmental agency requirements, including but not limited to the submission of properly prepared and duly acknowledged building plans and specifications; and

(e) Satisfactory evidence that the tap-on or connection to the existing sanitary and storm sewer and water facilities can be accomplished at an expense not to exceed \$5,200.00.

2. Seller hereby represents and warrants that he has no notice or knowledge of any existing, proposed or intended special taxes or assessments relating to the subject property and/or the immediate surrounding area.

3. The purchase and closing contemplated hereunder are contingent upon Purchasers obtaining, within thirty (30) days from the date of Seller's acceptance thereof, a written firm commitment for a mortgage loan in an amount of not less than 90% of the purchase price hereunder, at a fixed rate of interest not to exceed 12 1/2%, for a twenty (20) year fully amortized term, with a service charge or loan origination fee not to exceed 3%. In the event Purchasers fail to secure the aforescribed financing within said thirty (30) day time period, this offer shall become null and void, and all earnest money deposited by Purchasers (including all accrued interest thereon) shall within five (5)

days thereafter be refunded to Purchasers.

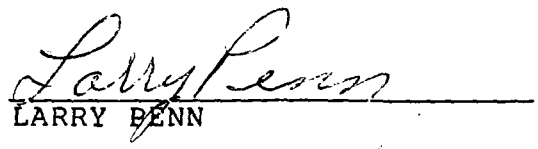
IN WITNESS WHEREOF, the parties have hereunto set their hands and seals in Lombard, Illinois, this 15 day of March, 1984.

PURCHASERS:


MICHAEL J. BALES


STEVEN J. BALES

SELLER:


LARRY PENN

PLAT OF SURVEY

THE WEST 70 FEET OF THE WEST ONE-THIRD OF LOT 20 IN ARTHUR T. McINTOSH'S 1ST ADDITION TO BELMONT, A SUBDIVISION OF PARTS OF SECTIONS 1, 2, 11, AND 12, TOWNSHIP 38 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN IN DU PAGE COUNTY, ILLINOIS.

Exhibit B

60720201

E

KNOWN AS 410 HITCHCOCK AVE. Lisle, ILLINOIS

ROUND 3/4" IRON ROD

627.0'

70.0'

139.0'

418.0'

ROUND 3/4" IRON PIPE

20

L O T

EAST LINE OF WEST 70.0' OF WEST 1/3

EAST LINE OF THE WEST 1/3

33.0'

AVE.

WALNUT

1 STORY FRAME HOUSE
36.54' x 36.45'

GRAVE DRIVE

70.0'

139.0'

418.0'

ROUND 3/4" IRON PIPE

627.0'

33.0'

HITCHCOCK

AVE.

State of Illinois
County of Du Page S.S.

This is to certify that I, GORDON G. FREY, ILLINOIS LAND SURVEYOR #1151, have surveyed the above described property, as shown on the annexed plat, which is a correct representation of said survey. All distances are shown in feet and decimals thereof.

Given under my hand and seal this 15th day of February, A.D., 1983.

Exhibit H

HC
6-2-11
E

EPA Generator
ID # 040300010
I.D.
IL0018214901

DOWNERS GROVE SANITARY DISTRICT

Discharge Permit No. 16
Issuance Date: 11/20/87
Expiration: 11/20/92

Permittee Name: Bales Mold Service, Inc.

Permittee Address: 2824 Hitchcock
Downers Grove, Illinois 60515

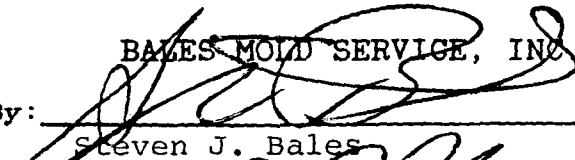
Name of Premise Permitted: Bales Mold Service, Inc.

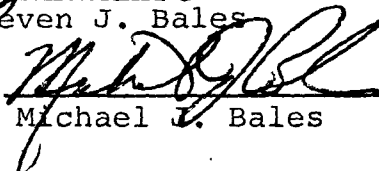
Location of Premise Permitted: 2824 Hitchcock
Downers Grove, Illinois 60515

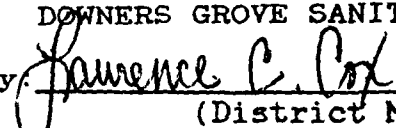
The above designated Permittee is hereby authorized to discharge wastewater to the sanitary sewer system of the Downers Grove Sanitary District subject to said Permittee's compliance with applicable pretreatment standards, District ordinances, and the terms and conditions of this permit. The Permittee is not authorized to discharge wastewater to the District except by permit.

The Permittee is not authorized to discharge after the above expiration date or the expiration date of any renewal of this permit. The Permittee shall submit such information, forms, and fees as are required by the District not later than ninety (90) days prior to the expiration date.

Permittee:

BALES MOLD SERVICE, INC.
By: 
Steven J. Bales

Attest: 
Michael J. Bales

DOWNERS GROVE SANITARY DISTRICT
By: 
(District Manager)

Attest: 
(Assistant Clerk)

I. Description of the Permitted Discharge

The permitted facility contains processes for hard chrome plating and finishing of plastic extrusion molds.

No process wastewater is discharged to the sanitary sewer system. The facility's discharge consists of domestic wastewater only.

The total discharge from this facility is estimated at 150 gallons per day.

The point of discharge to the sanitary sewer system is 15 Feet west of District Manhole Number 3-A-62.

II. Discharge Limitations

A) This facility is governed by the Federal categorical standards for the Electroplating Industry (40 CFR Part 413). Any wastewater discharged from the electroplating process must meet the following concentration based limitations at the point of discharge before mixing with any other process or sanitary wastes:

| <u>Pollutant</u> | <u>Daily Maximum (mg/L)</u> | <u>Maximum 4-Day Average (mg/L)</u> |
|----------------------------|---------------------------------|---|
| Cadmium | 1.2 | 0.7 |
| Lead | 0.6 | 0.4 |
| Cyanide (amenable) | 5.0 | 2.7 |
| Total Toxic Organics (TTO) | 4.57 | --- |

B) The combined domestic and process flow discharged to the sanitary sewer system shall meet the following specific limitations, at the inspection manhole location, based on a 24 hour composite sample:

| <u>Pollutant</u> | <u>Limit</u> | <u>Pollutant</u> | <u>Limit</u> |
|----------------------|--------------|------------------|--------------|
| Cadmium, total | 1.61 mg/L | Lead, total | 3.84 mg/L |
| Chromium, trivalent | 15.1 mg/L | Mercury, total | 0.076 mg/L |
| Chromium, hexavalent | 3.0 mg/L | Nickel, total | 8.6 mg/L |
| Copper, total | 3.38 mg/L | Silver, total | 0.57 mg/L |
| Cyanide, total | 1.74 mg/L | Zinc, total | 2.61 mg/L |

C) Spent plating solutions, precipitates, sludges, filter residues and solvents shall not be discharged to the District's system, but shall be disposed of or reclaimed by an approved method.

D) All discharges from this facility shall be in compliance with the ordinances of the District, the statutes of the State of Illinois, and the regulations of the U.S. Environmental Protection Agency, and the Illinois Environmental Protection Agency.

E) The discharge from this facility shall not produce any adverse effects on the District sanitary sewer service that would endanger private or public property, the public health, the integrity of the receiving stream, and/or the treatment processes of the District Wastewater Treatment Center.

III. Self-Monitoring and Reporting Requirements

A) The Permittee shall report to the District on a semi-annual basis. These reports shall be due by the twentieth day of July and January and shall cover the six month period of January through June and July through December respectively. Reports shall be completed by the Permittee on report forms provided by the District. The information required to be reported shall include the amount of any plating solutions, sludges and/or filtrates disposed of during the reporting period, the name of the hauler and the ultimate destination.

B) The semi-annual self-monitoring reports shall include a description of any occurrence of an accidental or deliberate discharge of materials which are prohibited by this permit, or the general pretreatment regulations, from discharge to the sanitary sewer system. The description shall include the type and volume of material discharged, how the incident occurred, who was notified and what actions have been taken to prevent a recurrence. If no such discharges occurred, the following certification statement shall be indicated:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics, I certify, that to the best of my knowledge and belief, no prohibited material have been discharged since filing discharge compliance report. I further certify that this facility is implementing the spill control plan submitted to the District."

C) The Permittee shall notify the District immediately by telephone upon any accidental or slug discharge to the District system. Within fifteen days of the incident, the Permittee shall submit a written report describing the event and what actions have been taken to prevent a recurrence.

D) All measurements, tests, and analyses to which reference is made in this permit shall be determined and performed in accordance with the procedures established by the USEPA Administrator pursuant to Section 304 (g) of the Clean Water Act and contained in 40 CFR Part 136 and amendments thereto or with other test procedures approved by the USEPA Administrator. Sampling shall be performed in accordance with the techniques approved by the USEPA Administrator. Where 40 CFR Part 136 does not include sampling or analytical techniques for the pollutants in question or where the USEPA Administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any sampling and analytical procedures approved by the USEPA Administrator.

IV. Permit Conditions

A) The Permittee shall install and maintain any equipment and implement any measures as are required to maintain compliance with the discharge limitations stated in Section II, Subparagraphs A through E.

B) In the event the Permittee does not comply with the conditions of this permit, the Manager of the District shall immediately notify the Permittee in writing of the specific violation of this permit. The Permittee shall be given ten (10) working days from the receipt of the aforementioned notification to respond to the District in writing, detailing the steps taken or to be taken by the Permittee to prevent a recurrence of the cited violation. In the event the Manager of the District determines that the Permittee's action will not prevent a recurrence of a violation of this permit, the Manager will notify the Permittee in writing of the measures and/or devices that the Permittee must institute to comply with the conditions of this permit and the time period in which said measures and/or devices must be implemented. The above provisions are in addition to, not in lieu of, any other enforcement remedies available to the District.

C) The falsification or intentional misrepresentation by the Permittee of any data or information required under this permit shall void this permit.

V. General Conditions

A) All discharges authorized herein shall be consistent with the terms and conditions of this permit. In the event the type, quality or volume of wastewater from this facility is expected to materially and substantially change, the permittee shall give a thirty (30) day notice in writing to the District and shall make a new application to the District prior to said change. The Permittee shall not materially and substantially change the type, quality, or volume of its wastewater beyond that allowed by this permit without prior approval of the District.

B) The Permittee shall allow representatives of the Downers Grove Sanitary District, upon presentation of credentials, ready access at all reasonable times to all parts of the Permittee's premises for the purposes of inspection, sampling, records examination, or other tasks necessary to monitor and insure compliance by the Permittee with the terms and conditions of this permit. The Permittee hereby licenses the District the right to use the existing roadway, parking lot and surface areas of the Permittee's facility for the purpose of collecting samples and making inspections of the wastewater discharges to the District's system.

C) All monitoring reports required by this permit will be available for public inspection at the District offices.

D) The Permittee shall retain for a minimum of three (3) years and afford the District access to any and all records of monitoring activities, and results relating to wastewater discharges from the subject facility.

E) This permit is issued to the named Permittee for the specific operations permitted and is not transferable or assignable without the approval of the District.

F) Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any State, Federal or local laws.

G) In the event a court of competent jurisdiction determines that any portion(s) of this permit is invalid, such determination shall not affect the validity of the remaining portions of this permit.

H) When a compliance schedule has been included as part of the Permit, a Pretreatment Compliance Schedule Progress Report is to be submitted to the District no later than 14 days after the scheduled date for each increment of progress. At a minimum, these reports shall include whether the increment of progress has been complied with, and if not, the date which the Permittee expects to comply with the increment of progress, and the steps being taken to return to the schedule established.

VI. Term of Permit

The term of this permit shall be from the issuance date of this permit to the stated expiration date. Provided, however, that the permit is contingent upon the issuance of a NPDES permit to the District. Provided further, that in the event a valid law, regulation, or ordinance requires the amendment of the terms and conditions of this permit, prior to its anticipated expiration date, the District may amend this permit upon sixty (60) days written notice to the Permittee.

VII. Compliance Schedule

1. SPILL CONTAINMENT PLAN: The Permittee shall develop and submit to the District a Spill Containment Plan for the facility permitted. The plan shall describe the use, storage, disposal and spill clean up procedures for the chemicals on site. The following schedule shall be adhered to for compliance with this requirement.

Increment of ProgressScheduled Completion

Written Spill Containment Plan to be developed, submitted and implemented.

November 30, 1987

REPORTING REQUIREMENT SUMMARY

| <u>Item</u> | <u>Due at DGSD</u> |
|--|--|
| 1. Semi-Annual Self-Monitoring Reports | By the twentieth day of January and January each year. |
| 2. Spill or Slug Reports | Notify the District's Laboratory Director, Janet Lacina or Operations Director, Ralph Smith by telephone as soon as possible after the spill or slug discharge has been discovered. A written report must be submitted to and received by DGSD within fifteen calendar days of the telephone notification. |
| 3. Compliance Reports | Submitted within 14 calendar days after the scheduled completion of an increment of progress listed in the compliance schedule. |
| 4. Process or Flow Changes | Submitted to and received by the DGSD within 30 calendar days prior to any changes at which time re-application shall be made for the Industrial Discharge Permit. |
| 5. Permit Renewal Application | Submitted to and received by DGSD 90 calendar days in advance of current permit expiration date. |
| All reports should be mailed to: | Janet Lacina Laboratory Services Director DOWNERS GROVE SANITARY DISTRICT 2710 Curtiss Street Downers Grove, IL 60515 |

DGSD Telephone Contacts

Mon-Fri, 8:30 A.M. - 4:30 P.M....969-0664.....Laboratory Services Director

During non-business hours, weekends and holidays, call the same number, 969-0664 and leave a message with the answering service for the person on call.



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-9276

CERTIFIED MAIL

P 435 222 322

CONSTRUCTION PERMIT DENIAL -- OPERATING PERMIT GRANT

PERMITTEE

Bales Mold Service, Inc.
Attn: Mr. Steve Bales
2824 Hitchcock Avenue
Downers Grove, IL 60515

Application No.: 93120007

I.D. No.: 043030AEI

Applicant's Designation: IEPAAP931

Date Received: December 2, 1993

Subject: Injection on Mold Servicing

Date Issued: March 1, 1994

Operating Permit Expiration Date: December 2, 1998

Location: 2824 Hitchcock Avenue, Downers Grove

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a caustic strip tank, one small blaster controlled with cyclone-filter, one medium blaster controlled with baghouse, one large blaster controlled with baghouse, one vapor blast liquid honing, one nickel plating line with packed scrubber, one small and one large hard chrome plating lines controlled with two demisters and one packed scrubber and ten polishing stations and one grinder controlled with baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. This permit is issued based on negligible emissions of particulate matter from each piece of equipment mentioned above. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 2a. The value for amp hours from all chrome plating operations shall be limited to 186,000 amp-hr/day. This limit is based on the rectifier rating and the hours the rectifier is energized as indicated in the permit application. Amp hours will be calculated in accordance with the following formula:

$$\text{Amp-hr} = (\text{Rectifier Rating, in Amps}) \times (\text{Percentage of Rating Used}) \\ \times (\text{Hours Energized})$$

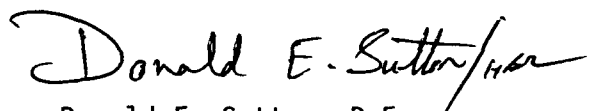
The Agency shall be notified in writing of any change in the mode of operation that will result in exceedance of the limit stated above and would therefore require a revised permit.

- b. The Permittee shall maintain records for each chrome plating operation consisting of rectifier rating, percentage of rating used and hours the rectifier is energized that will allow calculation of the value for amp hours to enable the Agency to verify compliance with the permitted limit. These records shall be maintained for the most recent two years and shall be available for inspection by the Agency.
- c. This permit is issued based upon the facility conducting Nickel and hard Chrome plating. Any additional metal other than previously permitted will require a revised permit.
3. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), Chromium VI in this source category Chromium Electroplating will be subject to the Maximum Achievable Control Technology (MACT) emission standard scheduled to be promulgated no later than November 23, 1994 (This has been proposed December 16, 1993). The chemical(s) is targeted in the federal 33/50 Pollution Prevention Program. The State of Illinois has a similar program entitled "Partners in Prevention." Additional information regarding these pollution prevention programs can be obtained by contacting Michael Hayes, Manager, Office of Pollution Prevention (217)785-0833.

Pursuant to 35 Ill. Adm. Code 201.142, a construction permit is to be obtained prior to constructing or modifying an air pollution emission source or control equipment. Information available to the Agency indicates that the construction or modification of equipment described in this application has been completed prior to the filing of this application. Consequently, your application for CONSTRUCTION permit is hereby DENIED.

If you have any questions on this, please call Jacquelyn Neuber at 217/782-2113.



Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JSN:drk:78Q/sp/55-56

cc: Region 1
Angie Giacomini, Legal Counsel



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

**STANDARD CONDITIONS
FOR
OPERATING PERMITS**

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special permit condition(s).

1. The issuance of this permit does not release the permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or with applicable local laws, ordinances and regulations.
2. The Agency has issued this permit based upon the information submitted by the permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.207.
3.
 - a. The permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Agency and unless a new permit or revision of the existing permit(s) is issued for such modification.
 - b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.
4. The permittee shall allow any duly authorized agent of the Agency, upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emission of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.
5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located,
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities,

Directory Environmental Protection Agency Bureau of Air

September 1, 1992

For assistance in preparing a permit application,
contact the Permit Section:

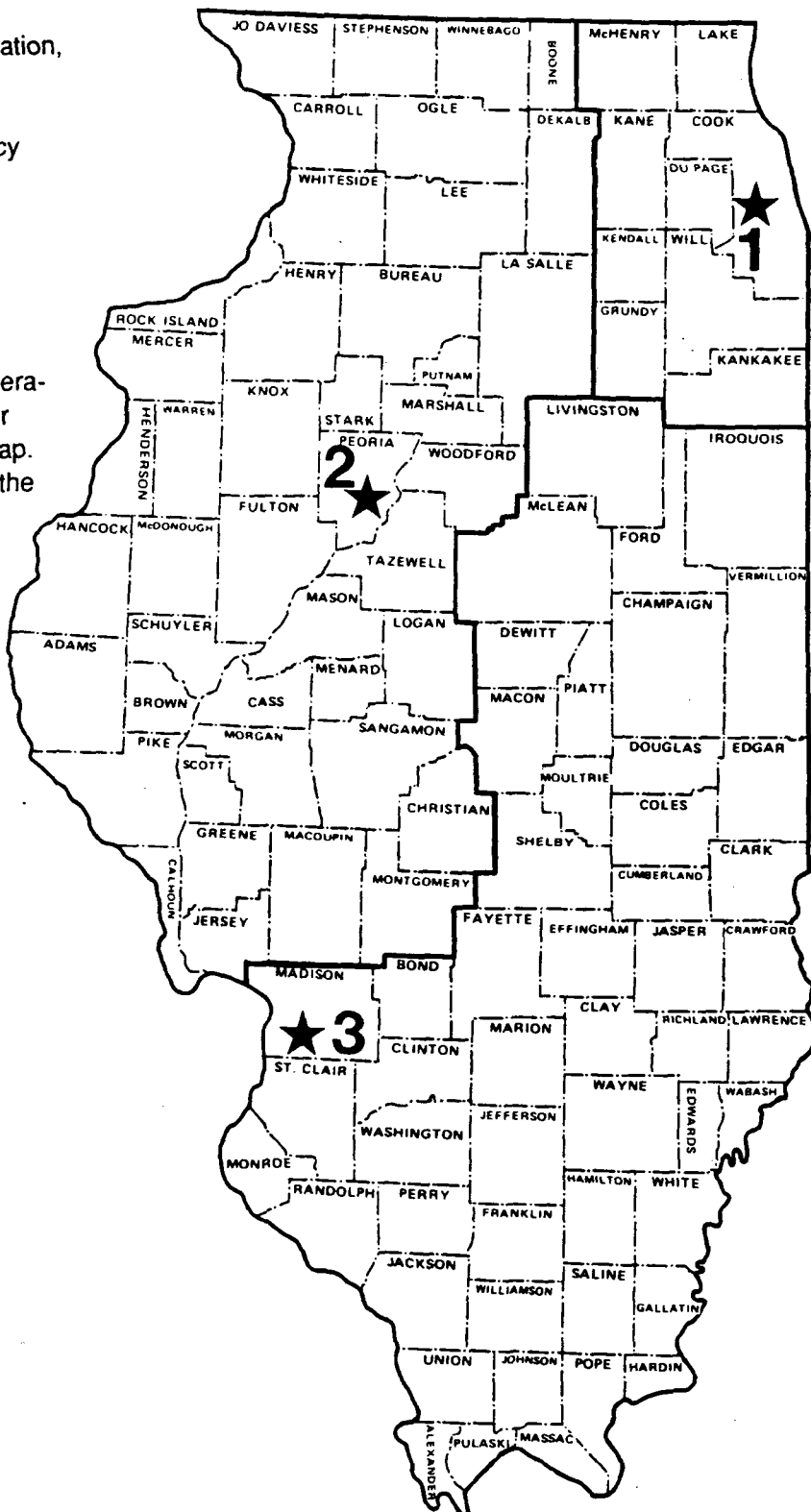
Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
2200 Churchill Road
Springfield, Illinois 62706
217/782-2113

Or contact a regional office of the Field Operations Section. The regional offices and their areas of responsibility are shown on the map. The addresses and telephone numbers of the regional offices are as follows:

Illinois EPA
Region 1
Intercontinental Center
1701 South 1st Avenue
Maywood, Illinois 60153
708/531-5900

Illinois EPA
Region 2
5415 North University
Peoria, Illinois 61614
309/693-5461

Illinois EPA
Region 3
2009 Mall Street
Collinsville, Illinois 62234
618/346-5120





State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT GRANT

PERMITTEE

Bales Mold Service, Inc.
Attn: Mr. Steve Bales
2824 Hitchcock Avenue
Downers Grove, IL 60515

Application No.: 93120007

I.D. No.: 043030AEI

Applicant's Designation: IEPAAP931

Date Received: October 12, 1994

Subject: Injection on Mold Servicing

Date Issued: December 6, 1994

Expiration Date: December 2, 1998

Location: 2824 Hitchcock Avenue, Downers Grove

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a caustic stripping tank, one small blaster controlled with cyclone-filter, one medium blaster controlled with baghouse, one large blaster controlled with baghouse, one vapor blast liquid honing, one nickel plating line with packed scrubber, two hard chrome plating lines (Tank A and B) with two demisters and one packed scrubber and ten polishing stations and one grinder controlled with baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. This permit is issued based on negligible emissions of particulate matter from each piece of equipment mentioned above. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 2a. The value for amp hours from all chrome plating operations shall be limited to 81,720 amp-hr/day. This limit is based on the rectifier rating and the hours the rectifier is energized as indicated in the permit application. Amp hours will be calculated in accordance with the following formula:

$$\text{Amp-hr} = (\text{Rectifier Rating, in Amps}) \times (\text{Percentage of Rating Used}) \\ \times (\text{Hours Energized})$$

The Agency shall be notified in writing of any change in the mode of operation that will result in exceedance of the limit stated above and would therefore require a revised permit.

- b. The Permittee shall maintain records for each chrome plating operation consisting of rectifier rating, percentage of rating used and hours the rectifier is energized that will allow calculation of the value for amp hours to enable the Agency to verify compliance with the permitted limit. These records shall be maintained for the most recent two years and shall be available for inspection by the Agency.
- c. This permit is issued based upon the facility conducting Nickel and hard Chrome plating. Any additional metal other than previously permitted will require a revised permit.
3. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

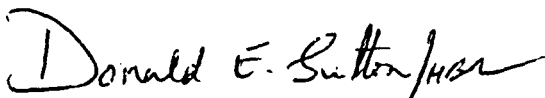
Pursuant to the Clean Air Act Amendments of 1990 (CAAA), Chromium Electroplating and Anodizing will be subject to the Maximum Achievable Control Technology (MACT) emission standard. The final rule for this source category was signed November 23, 1994 and is expected to be published in the Federal Register in December 1994. All facilities in this source category will be required to show compliance with the new rule after it is published in the Federal Register.

The chemical(s) is targeted in the federal 33/50 Pollution Prevention Program. The State of Illinois has a similar program entitled "Partners in Prevention." Additional information regarding these pollution prevention programs can be obtained by contacting Michael Hayes, Manager, Office of Pollution Prevention (217)785-0833.

Please note that this permit has been revised to include the operation of two new hard chrome plating lines (Tanks A and B) and a new caustic stripping tank, replacing the large and small chrome plating tanks and the old caustic stripping tank.

It should also be noted that during the analysis of this application for an operating permit, it was determined that your facility will be required to obtain a Clean Air Act Permit Program permit which is required for chromium electroplating and anodizing.

If you have any questions on this, please call Ernie Kierbach at 217/782-2113.



Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:ELK:jar/0541Q,30-31

cc: Region 1



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

**STANDARD CONDITIONS
FOR
OPERATING PERMITS**

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special permit condition(s).

1. The issuance of this permit does not release the permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or with applicable local laws, ordinances and regulations.
2. The Agency has issued this permit based upon the information submitted by the permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.207.
3.
 - a. The permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Agency and unless a new permit or revision of the existing permit(s) is issued for such modification.
 - b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.
4. The permittee shall allow any duly authorized agent of the Agency, upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emission of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.
5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located,
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities,

**Directory
Environmental Protection Agency
Bureau of Air**

September 1, 1992

For assistance in preparing a permit application,
contact the Permit Section:

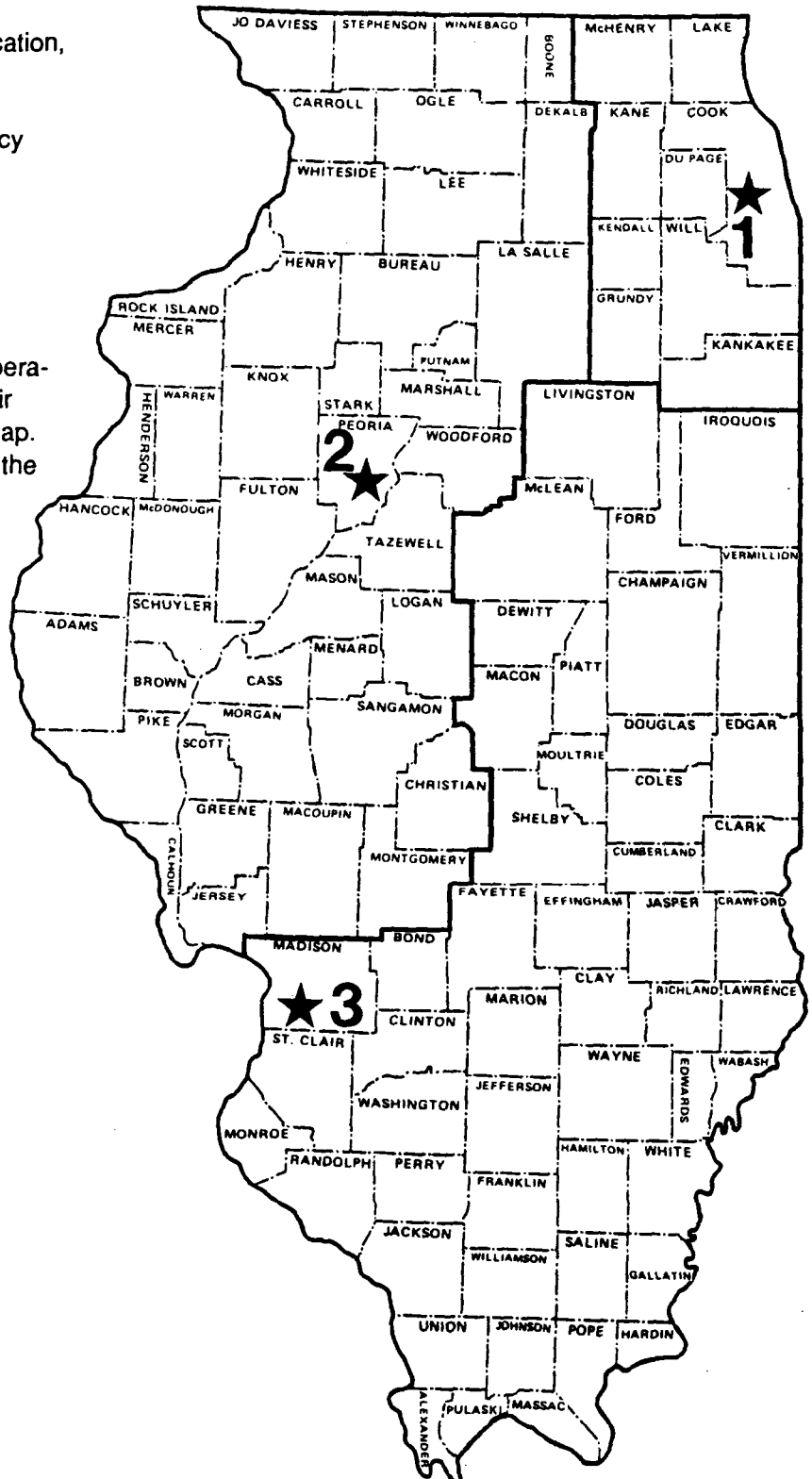
Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
2200 Churchill Road
Springfield, Illinois 62706
217/782-2113

Or contact a regional office of the Field Operations Section. The regional offices and their areas of responsibility are shown on the map. The addresses and telephone numbers of the regional offices are as follows:

Illinois EPA
Region 1
Intercontinental Center
1701 South 1st Avenue
Maywood, Illinois 60153
708/531-5900

Illinois EPA
Region 2
5415 North University
Peoria, Illinois 61614
309/693-5461

Illinois EPA
Region 3
2009 Mall Street
Collinsville, Illinois 62234
618/346-5120





State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-92

CONSTRUCTION PERMIT

PERMITTEE

Bales Mold Service, Inc.
Attn: Mr. Steve Bales
2824 Hitchcock Avenue
Downers Grove, IL 60515

Application No.: 94100034

I.D. No.: 043030AEI

Applicant's Designation: IEPAAP931

Date Received: October 12, 1994

Subject: Chrome Plating and Caustic Stripping

Date Issued: December 6, 1994

Location: 2824 Hitchcock Avenue, Downers Grove

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a caustic stripping tank and two hard chrome plating lines (Tank A and B) with two demisters and one packed scrubber as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. This permit is issued based on negligible emissions of particulate matter from each piece of equipment mentioned above. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 2a. The value for amp hours from all chrome plating operations shall be limited to 81,720 amp-hr/day. This limit is based on the rectifier rating and the hours the rectifier is energized as indicated in the permit application. Amp hours will be calculated in accordance with the following formula:

$$\text{Amp-hr} = (\text{Rectifier Rating, in Amps}) \times (\text{Percentage of Rating Used}) \\ \times (\text{Hours Energized})$$

The Agency shall be notified in writing of any change in the mode of operation that will result in exceedance of the limit stated above and would therefore require a revised permit.

- b. The Permittee shall maintain records for each chrome plating operation consisting of rectifier rating, percentage of rating used and hours the rectifier is energized that will allow calculation of the value for amp hours to enable the Agency to verify compliance with the permitted limit. These records shall be maintained for the most recent two years and shall be available for inspection by the Agency.

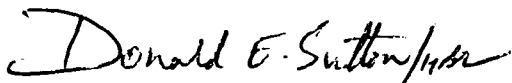
- c. This permit is issued based upon the facility conducting Nickel and hard Chrome plating. Any additional metal other than previously permitted will require a revised permit.
3. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), Chromium Electroplating and Anodizing will be subject to the Maximum Achievable Control Technology (MACT) emission standard. The final rule for this source category was signed November 23, 1994 and is expected to be published in the Federal Register in December 1994. All facilities in this source category will be required to show compliance with the new rule after it is published in the Federal Register.

The chemical(s) is targeted in the federal 33/50 Pollution Prevention Program. The State of Illinois has a similar program entitled "Partners in Prevention." Additional information regarding these pollution prevention programs can be obtained by contacting Michael Hayes, Manager, Office of Pollution Prevention (217)785-0833.

Please note that this permit has been issued to include the operation of two new hard chrome plating lines (Tanks A and B) and a new caustic stripping tank, replacing the large and small chrome plating tanks and the old caustic stripping tank.

If you have any questions on this, please call Ernie Kierbach at 217/782-2113.



Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:ELK:jar/0541Q,35-36

cc: Region 1



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

**STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire on year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emissions of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

Directory Environmental Protection Agency Bureau of Air

September 1, 1992

For assistance in preparing a permit application,
contact the Permit Section:

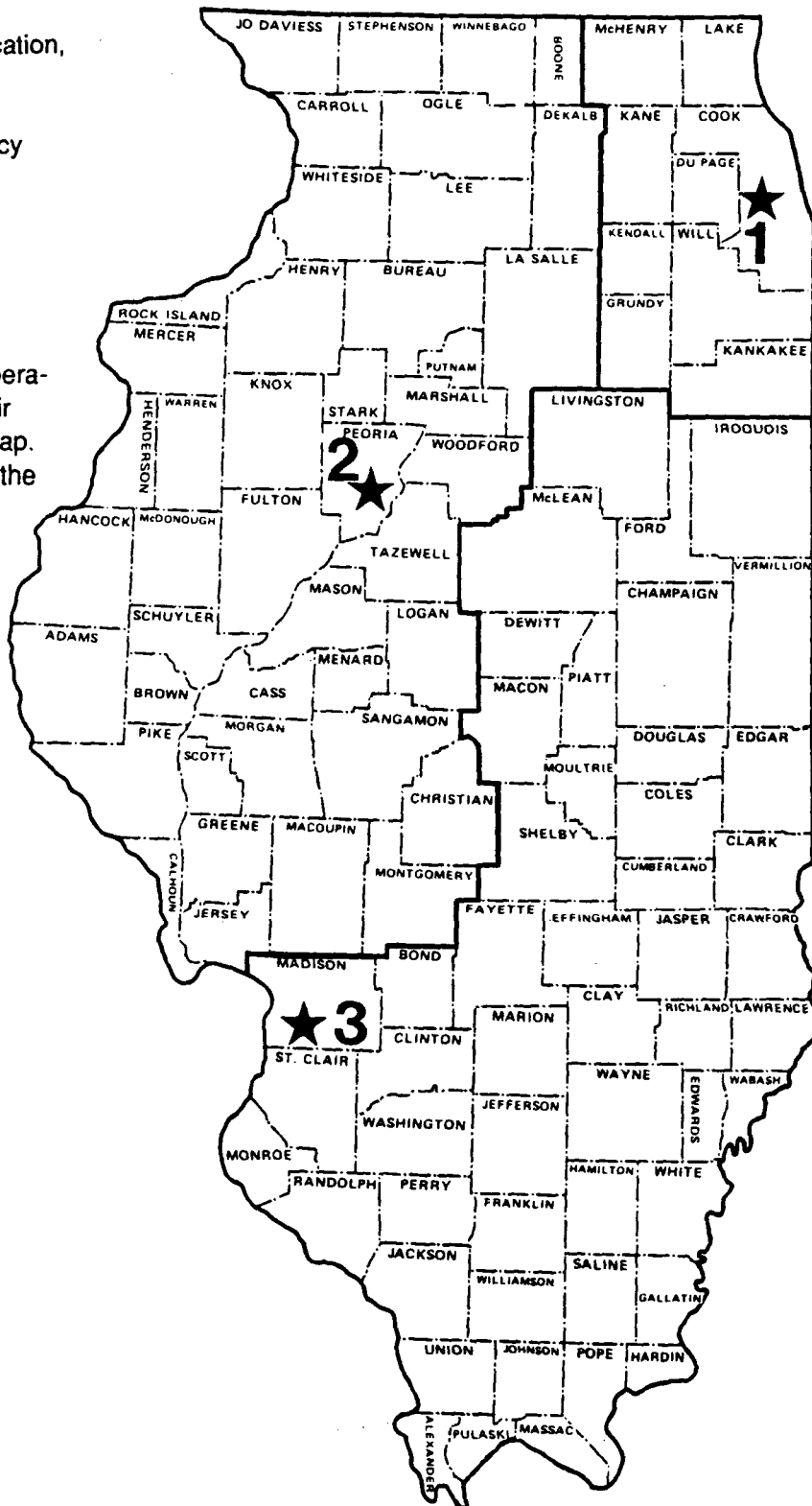
Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
2200 Churchill Road
Springfield, Illinois 62706
217/782-2113

Or contact a regional office of the Field Operations Section. The regional offices and their areas of responsibility are shown on the map. The addresses and telephone numbers of the regional offices are as follows:

Illinois EPA
Region 1
Intercontinental Center
1701 South 1st Avenue
Maywood, Illinois 60153
708/531-5900

Illinois EPA
Region 2
5415 North University
Peoria, Illinois 61614
309/693-5461

Illinois EPA
Region 3
2009 Mall Street
Collinsville, Illinois 62234
618/346-5120





Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT GRANT

PERMITTEE

Bales Mold Service, Inc.
Attn: Mr. Steve Bales
2824 Hitchcock Avenue
Downers Grove, IL 60515

RECEIVED
MAYWOOD OFFICE

DEC 14 1994

REPA/DAPC
STATE OF ILLINOIS

Application No.: 93120007

I.D. No.: 043030AEI

Applicant's Designation: IEPAAP931

Date Received: October 12, 1994

Subject: Injection on Mold Servicing

Date Issued: December 6, 1994

Expiration Date: December 2, 1998

Location: 2824 Hitchcock Avenue, Downers Grove

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a caustic stripping tank, one small blaster controlled with cyclone-filter, one medium blaster controlled with baghouse, one large blaster controlled with baghouse, one vapor blast liquid honing, one nickel plating line with packed scrubber, two hard chrome plating lines (Tank A and B) with two demisters and one packed scrubber and ten polishing stations and one grinder controlled with baghouse as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. This permit is issued based on negligible emissions of particulate matter from each piece of equipment mentioned above. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 2a. The value for ~~amp~~ hours from all chrome plating operations shall be limited to 81,720 amp-hr/day. This limit is based on the rectifier rating and the hours the rectifier is energized as indicated in the permit application. Amp hours will be calculated in accordance with the following formula:

$$\text{Amp-hr} = (\text{Rectifier Rating, in Amps}) \times (\text{Percentage of Rating Used}) \\ \times (\text{Hours Energized})$$

The Agency shall be notified in writing of any change in the mode of operation that will result in exceedance of the limit stated above and would therefore require a revised permit.

- b. The Permittee shall maintain records for each chrome plating operation consisting of rectifier rating, percentage of rating used and hours the rectifier is energized that will allow calculation of the value for amp hours to enable the Agency to verify compliance with the permitted limit. These records shall be maintained for the most recent two years and shall be available for inspection by the Agency.
- c. This permit is issued based upon the facility conducting Nickel and hard Chrome plating. Any additional metal other than previously permitted will require a revised permit.
3. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), Chromium Electroplating and Anodizing will be subject to the Maximum Achievable Control Technology (MACT) emission standard. The final rule for this source category was signed November 23, 1994 and is expected to be published in the Federal Register in December 1994. All facilities in this source category will be required to show compliance with the new rule after it is published in the Federal Register.

The chemical(s) is targeted in the federal 33/50 Pollution Prevention Program. The State of Illinois has a similar program entitled "Partners in Prevention." Additional information regarding these pollution prevention programs can be obtained by contacting Michael Hayes, Manager, Office of Pollution Prevention (217)785-0833.

Please note that this permit has been revised to include the operation of two new hard chrome plating lines (Tanks A and B) and a new caustic stripping tank, replacing the large and small chrome plating tanks and the old caustic stripping tank.

It should also be noted that during the analysis of this application for an operating permit, it was determined that your facility will be required to obtain a Clean Air Act Permit Program permit which is required for chromium electroplating and anodizing.

If you have any questions on this, please call Ernie Kierbach at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:ELK:jar/0541Q,30-31

cc: Region 1

COPY

Original Signed by
Donald E. Sutton, P.E.

MAY-21-1998

E.P.A. INSPECTION FOR
COMPLIANCE BY NAT ZALA
AND AFTER TALKING TO
DIXON NWAJI 217-782-7397
IT WAS HIS DECISION THAT
WE DID NOT NEED AMP/HOUR
METERS ON OUR RECTIFIERS

CLEAN AIR ACT



Illinois Environmental Protection Agency

Nat Zala

Environmental Protection Engineer
Field Operations Section
Division of Air Pollution Control

1701 South First Avenue, Suite 600
Maywood, Illinois 60153

Printed on Recycled Paper

708/338-7900

FAX 708/338-7930

SET UP BY SANDY SUNDBERG
1-847-546-1079

CALCULATION SHEET

| | |
|--|---------------------------|
| Facility <u>Bales Mold Service, Inc</u> | I.D. <u>043 030 AEI</u> |
| Anal. Eng. <u>FLK</u> Date <u>11 30 94</u> | PN <u>9 3 12 0007</u> |
| Rev. Eng. _____ Date _____ | Date Rec. <u>10 12 94</u> |

NO FLAGS

DuPage County (NAA)

Application for an operating permit for injection mold servicing for new STRIPPER
~~new~~ 2-chrome tanks and removal of old STRIPPER & old large & small chrome tanks.

SEE CALCULATION SHEET DATED 11/28/94 IN CONSTRUCTION PERMIT # 9410065

NEW CAUSTIC TANK w/ demister

Particulate emissions = .1 lb/hr .44 TBY

Old tank emissions SAME NO INCREASE incompliance w/ 212.321

NEW STRIPPER PLATING TANKS A+B w/ Packed tower & 2 demisters

Particulate emissions total limit each to reg .1 lb/hr .44 TBY each

old tank emissions same NO INCREASE

~~incompliance w/ 212.321~~ incompliance

SENT TO TOXIC SCREENING

NO INCREASE IN EMISSIONS

drop-hr = 81,720 Amp Hr limit

updated E12

Plant w/ current expiration date 12/12/98

Sander E. Sundberg, Ph.D., P.E.

Environmental Consultant

34928 North Augustana Avenue
Ingleside, Illinois 60041-9515

Phone: (1-847) 546-1079
FAX: (1-847) 546-5948

March 12, 1997

Illinois Environmental Protection Agency
Attn: Source Emission Test Specialist
Division of Air Pollution Control
Eisenhower Tower
1701 First Avenue
Maywood, IL 60153

RECEIVED
MAYWOOD OFFICE

MAR 13 1997

IL EPA/DAPC
STATE OF ILLINOIS

Subject: Notification of Compliance Test
Chromium Emission Test Program
I.D. No: 043030AEI
Application No: 93100034

Dear Mr. Mattison:

This letter will serve as the Notice to Test - Chromium Emissions
for:

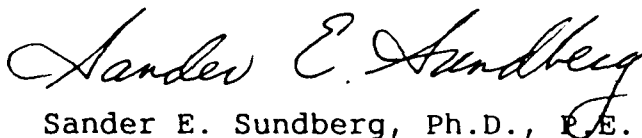
Bales Mold Service, Inc.
2824 Hitchcock Avenue
Downers Grove, IL 60455

The testing has been scheduled for Tuesday, May 20, 1997.

Enclosed with this Notice to Test is a Site Specific Test Plan.
The testing will be performed by ARI Environmental, Inc. I am
providing support services.

If you have any questions, please call.

Respectfully submitted,



Sander E. Sundberg, Ph.D., P.E.
Environmental Consultant

cc w/o enclosure: IEPA, Air Permit Section, Springfield
IEPA, Regional Office, Maywood



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

P. O. Box 19506, Springfield, IL 62794-9506

LIFETIME OPERATING PERMIT

PERMITTEE

Bales Mold Service, Inc.
Attn: Steve Bales
2824 Hitchcock Avenue
Downers Grove, Illinois 60515

Application No.: 93120007

Applicant's Designation: IEPAAP981R

Subject: Injection Mold Servicing

Date Issued: September 8, 1998

I.D. No.: 043030AEI

Date Received: July 22, 1998

Operating Permit Expiration

Date: See Condition 1.

Location: 2824 Hitchcock Avenue, Downers Grove

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

a caustic stripping tank,
one small blaster controlled with cyclone-filter,
one medium blaster controlled with baghouse,
one large blaster controlled with baghouse,
one vapor blast liquid honing,
one nickel plating line with packed scrubber,
two hard chrome plating lines (Tank A and B) with two demisters and one
packed scrubber and ten polishing stations and one grinder controlled
with baghouse

pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This operating permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
- b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.
2. This permit is issued based on negligible emissions of particulate matter from each piece of equipment mentioned above. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 3a. The value for amp hours from all chrome plating operations shall be limited to 81,720 amp-hr/day. This limit is based on the rectifier rating and the hours the rectifier is energized as indicated in the permit application. Amp hours will be calculated in accordance with the following formula:

$$\text{Amp-hr} = (\text{Rectifier Rating, in Amps}) \times (\text{Percentage of Rating Used}) \\ \times (\text{Hours Energized})$$

The Illinois EPA shall be notified in writing of any change in the mode of operation that will result in exceedance of the limit stated above and would therefore require a revised permit.

- b. The Permittee shall maintain records for each chrome plating operation consisting of rectifier rating, percentage of rating used and hours the rectifier is energized that will allow calculation of the value for amp hours to enable the Illinois EPA to verify compliance with the permitted limit. These records shall be maintained for the most recent two years and shall be available for inspection by the Illinois EPA.
- c. This permit is issued based upon the facility conducting Nickel and hard Chrome plating. Any additional metal other than previously permitted will require a revised permit.
4. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
5. Pursuant to the Clean Air Act Amendments of 1990 (CAAA), Chromium Electroplating and Anodizing will be subject to the Maximum Achievable Control Technology (MACT) emission standard. The final rule for this source category was signed November 23, 1994 and is expected to be published in the Federal Register in December 1994. All facilities in this source category will be required to show compliance with the new rule after it is published in the Federal Register.
6. The chemical(s) is targeted in the federal 33/50 Pollution Prevention Program. The State of Illinois has a similar program entitled "Partners in Prevention." Additional information regarding these pollution prevention programs can be obtained by contacting Michael Hayes, Manager, Office of Pollution Prevention (217) 785-0833.
7. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
8. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

9. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

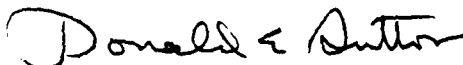
Illinois Environmental Protection Agency
Division of Air Pollution Control
Eisenhower Tower
1701 South First Avenue
Maywood, Illinois 60153

10. Persons with lifetime operating permits must obtain a revised permit for any of the following changes at the source:
- a. An increase in emissions above the amount the emission unit or the source is permitted to emit;
 - b. A modification;
 - c. A change in operations that will result in the source's noncompliance with conditions in the existing permit; or
 - d. A change in ownership, company name, or address, so that the application or existing permit is not longer accurate.

Please note that this permit has been revised to include the operation of two new hard chrome plating lines (Tanks A and B) and a new caustic stripping tank, replacing the large and small chrome plating tanks and the old caustic stripping tank.

It should also be noted that during the analysis of this application for an operating permit, it was determined that your facility will be required to obtain a Clean Air Act Permit Program permit which is required for chromium electroplating and anodizing.

If you have any questions on this permit, please contact Randy Solomon at 217/782-2113.



Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RBS:psj

cc: Region 1



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P.O. BOX 19506
SPRINGFIELD, IL 62794-9506

**STANDARD CONDITIONS
FOR
LIFETIME OPERATING PERMITS**

July 1, 1998

The Illinois Environmental Protection Act [415 ILCS 5/39 (formerly Illinois Revised Statutes, Chapter 111-1/2, Section 1039)] grants the Illinois Environmental Protection Agency authority to impose conditions on permits which it issues.

1. The issuance of this Permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois, or with applicable local laws, ordinances and regulations.
2. The Illinois EPA has issued this Permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for the revocation under 35 Ill. Adm. Code 201.166.
3.
 - a. The Permittee shall not authorize, cause, direct or allow any modification as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted, until the appropriate permit is obtained from the Illinois EPA.
 - b. The Permittee shall obtain a new or revised permit under Section 39.5 of the Act, if the source no longer meets the applicability criteria of 35 Ill. Adm. Code 201.169 because of changes in emissions units or control equipment.
 - c. The Permittee shall obtain a revised permit prior to any of the following changes at the source:
 - i. An increase in emissions above the amount the emission unit or the source is permitted to emit; or
 - ii. A modification; or
 - iii. A change in operations that will result in the source's noncompliance with a condition in the existing permit; or
 - iv. A change in ownership, company name, or address, so that the application or existing permit is no longer accurate.
4.
 - a. This Permit only covers emission units and control equipment while physically present at the indicated source location. Unless the Permit specifically provides for equipment relocation, this Permit is void for an item of equipment on the day it is removed from the permitted location, or if all equipment is removed.
 - b. The Permittee shall notify the Illinois EPA in writing to withdraw the Permit if all operations at the source have been permanently discontinued.

Directory Environmental Protection Agency Bureau of Air

September 1, 1992

For assistance in preparing a permit application,
contact the Permit Section:

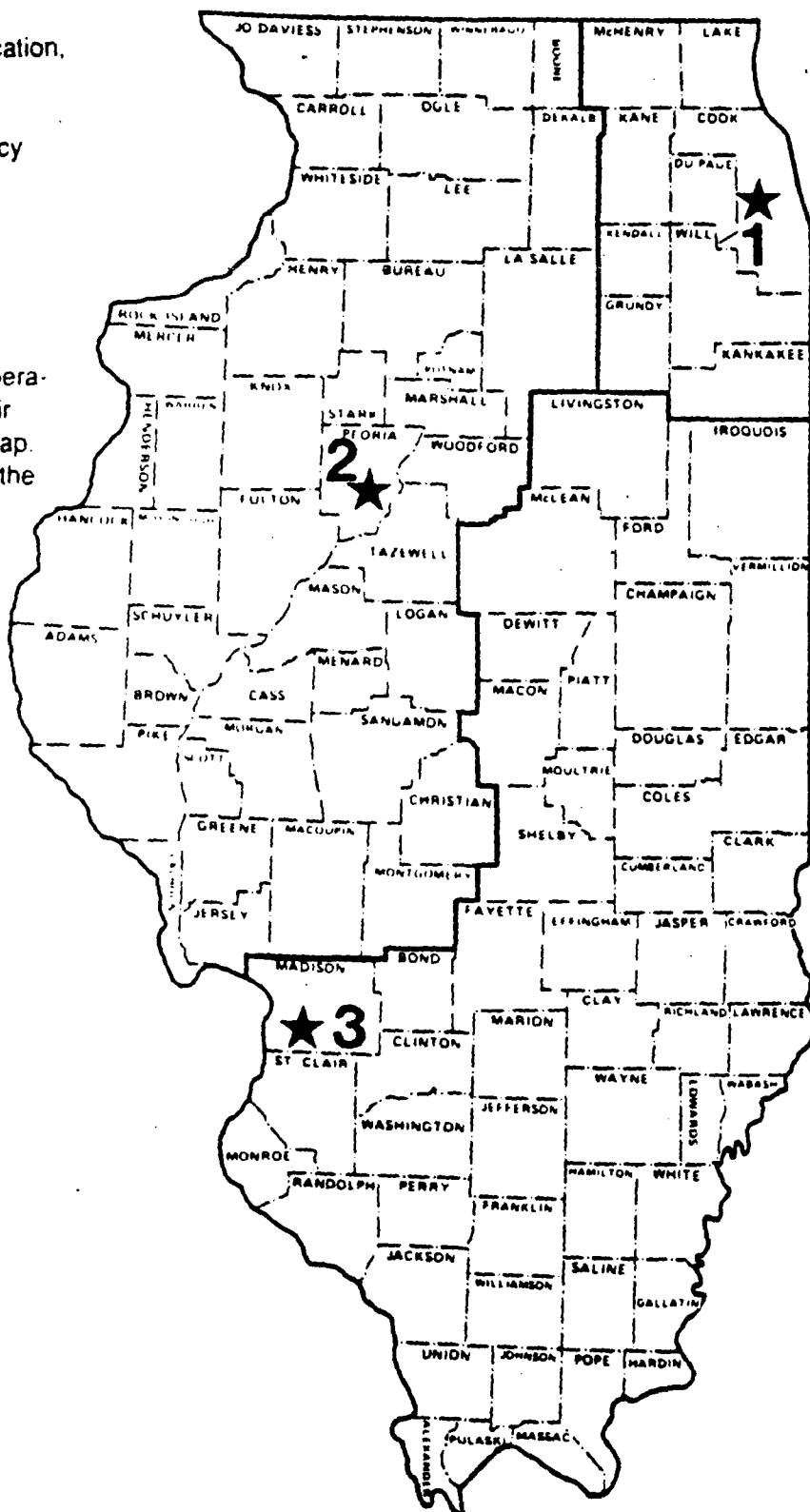
Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
2200 Churchill Road
Springfield, Illinois 62706
217/782-2113

Or contact a regional office of the Field Operations Section. The regional offices and their areas of responsibility are shown on the map. The addresses and telephone numbers of the regional offices are as follows.

Illinois EPA
Region 1
Intercontinental Center
1701 South 1st Avenue
Maywood, Illinois 60153
708/531-5900

Illinois EPA
Region 2
5415 North University
Peoria, Illinois 61614
309/693-5461

Illinois EPA
Region 3
2009 Mall Street
Collinsville, Illinois 62234
618/346-5120





State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

P. O. Box 19506, Springfield, IL 62794-9506

CONSTRUCTION PERMIT FOR HARD CHROME ELECTROPLATING OPERATION NESHAP SOURCE

PERMITTEE

Bales Mold Service, Inc.
Attn: Mr. Steve Bales
2824 Hitchcock Avenue
Downers Grove, Illinois 60515

Application No.: 98090076 I.D. No.: 043030AEI
Applicant's Designation: IEPAAP981 Date Received: September 25, 1998
Subject: Injection Mold Servicing Facility
Date Issued: November 5, 1998
Location: 2824 Hitchcock Avenue, Downers Grove

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission unit(s) and/or air pollution control equipment consisting of nickel stripping tank controlled by demister, caustic stripping tank controlled by demister, and hard chrome electroplating tank(s) controlled by composite mesh pad at the source as described in the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. Air pollution control equipment associated with a hard chrome electroplating tank(s) shall be operated at all times during tank operation, including periods of startup and shutdown.
- b. Hard chrome electroplating tank(s) shall not exceed the following limits, pursuant to 40 CFR 63.342(c)(1):

| <u>Hard Chromium Electroplating Tanks</u> | <u>Chromium Emissions</u> <u>(mg/dscm)</u> |
|---|---|
| New Small and/or Large Hard Chromium Electroplating Facility Tank(s) | 0.015 |

This limit is the National Emission Standards for Chromium Emissions from Hard Chromium Electroplating Tanks, 40 CFR Part 63, Subpart N and is based on the maximum cumulative potential rectifier capacity of the hard chrome electroplating tanks being less than 60 million ampere-hours per year. An electroplating tank(s) installed before December 16, 1993, is considered as existing tank(s). Compliance with this limit shall be determined from initial performance testing and ongoing compliance monitoring requirements, as required by Conditions 5 and 8.

- c. Failure to operate in accordance with the operating parameter value(s), determined during initial performance testing, shall be considered a violation of the above limit, pursuant to 40 CFR 63, Subpart N.
2. The operation and maintenance practices required by 40 CFR 63.342(f) shall be implemented for control systems used on hard chrome electroplating tanks, including:

The following work practice standards for the composite mesh pad control system(s):

- a. A quarterly visual inspection of the composite mesh pad (CMP) system to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
 - b. A quarterly visual inspection of the back portion of the mesh pad closest to the fan to ensure that there is no breakthrough of chromic acid mist.
 - c. A quarterly visual inspection of the duct work from the tank(s) to the composite mesh pad scrubber(s) to ensure there are no leaks.
 - d. Perform washdown of the composite mesh-pads in accordance with manufacturer's recommendations.
3. The Permittee shall develop and implement an operation and maintenance (O & M) plan for hard chrome electroplating tanks which shall include at least the following, pursuant to 40 CFR 63.342(f)(3):
- a. Description of the operation and maintenance criteria for the control device(s) and monitoring equipment.
 - b. A checklist to document the operation and maintenance of the equipment.
 - c. Required work practice standards, pursuant to 40 CFR 63.342(f)(Condition 2).
 - d. Procedure to follow to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.
 - e. Procedure for identifying malfunctions and for implementing corrective actions.
- 4a. The hard chrome electroplating tank(s) may be operated for a period of 270 days under this construction permit.
- b. The hard chrome electroplating tank(s) shall not begin operation until construction of the tanks and associated control systems are complete, and reasonable measures short of actual operation have been taken to verify proper operation.
 - c. Within 180 days of initial startup, the chromium emissions of the hard chrome electroplating tank(s) shall be tested in accordance with Condition 5 to demonstrate compliance, pursuant to 40 CFR 63.343(b).
5. The following test methods and procedures shall be used for performance testing, pursuant to 40 CFR 63.344(c): Refer to 40 CFR 63, Appendix A, for USEPA test methods.

| | |
|---------------------------|--------------------------|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Chromium | USEPA Method 306 or 306A |

6a. At least thirty (30) days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review, pursuant to 40 CFR 63.344(a). This plan shall describe the specific procedures for testing, including as a minimum:

- i. The person(s) who will be performing sampling and analysis and their experience and qualifications with similar tests.
- ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, the levels of operating parameters at or within which compliance is intended to be shown, if applicable, and the means by which the operating parameters for the process and any control equipment will be determined.
- iii. The specific determination of emissions and operations which are intended to be made, including sampling and monitoring locations.
- iv. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical, and quality control procedures which will be used, with an identification of the standard method upon which they are based.
- v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- vi. Any proposed use of an alternative test method, with detailed justification.
- vii. The format and content of the Source Test Report.
- viii. A statement that the performance testing will be performed by a qualified independent testing service.

b. Prior to carrying out these tests, the Illinois EPA shall be notified in writing a minimum of thirty (30) calendar days prior to the scheduled date of these tests with the exact date, time, and place of these tests, to enable the Illinois EPA to observe these tests, pursuant to 40 CFR 63.347(d)(1).

If the scheduled date for the test is changed for unforeseen reasons, the Permittee shall inform the Illinois EPA within five (5) working days of the originally scheduled test date and must specify the date of the rescheduled test. Observation of the performance test by the Illinois EPA is optional.

c. Satisfactory completion of these tests and compliance with the limitations of this permit shall be a prerequisite to the issuance of an operating permit.

- d. During initial performance testing, the site specific "operating parameter value", i.e., range of pressure drop data across the composite mesh pad system shall be established to demonstrate continuous compliance, pursuant to 40 CFR 63.343(c). Pressure drop range can be established from the highest and lowest value during multiple performance testing or ± 1 inch of H₂O column about the average pressure drop measured during the three compliant test runs of one performance test.
- e. The Permittee shall follow the procedures of 40 CFR 63.344(d) to establish site-specific operating parameter values.
- 7. Three (3) copies of the Final Report(s) for performance tests and compliance status shall be submitted to the Illinois EPA within 90 calendar days after the performance test, pursuant to 40 CFR 63.347(f)(2) and 63.347(e)(3). If testing is not required, the report of compliance status shall be submitted no later than 30 days after the compliance date of January 25, 1997. The Final Report shall include, pursuant to 40 CFR 63.344(a):
 - a. General information, i.e., date of test, testing personnel and observers, if any.
 - b. A summary of test results and compliance status.
 - c. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - d. Detailed description of test conditions, including:
 - i. Process information, i.e., mode(s) of operation, process weight rate, e.g. raw material consumption, rectifier operating rate.
 - ii. Sampling and analytical procedures and any modifications to standard procedures.
 - iii. Control equipment record of:
 - A. Pressure drop range across the system to demonstrate continuous compliance.
 - iv. A discussion of any preparatory actions taken, i.e., standard preparation, inspections, maintenance, and repair.
 - v. A discussion of calibration procedures.
 - e. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - f. An explanation of any discrepancies among individual tests or anomalous data.

- g. Quality assurance procedures and results.
 - h. Any additional information required by the test method.
8. The Permittee shall keep the records required by 40 CFR 63.346(b) to demonstrate compliance, including the following:
- a. Records of monitoring data required by 40 CFR 63.343(c).
 - i. Pressure drop across the composite mesh-pad system, determined daily.
 - ii. If there are no exceedances of the maximum surface tension after 40 hours of operation, then the monitoring frequency can be decreased to once every 8 hours. If there are no exceedances for the next 40 hours, then the frequency can be decreased to once every 40 hours. If an exceedance occurs at any time after that, then the initial monitoring schedule (every 4 hours) must be resumed.
 - b. Inspection records for the control device and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 CFR 63.342(f) have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
 - c. Records of all maintenance performed on the hard chrome electroplating tanks, as related to emissions, the associated control system, and monitoring equipment.
 - d. Records of the occurrence, duration, and cause (if known) of each malfunction of the hard chrome electroplating process, associated control system, and monitoring equipment.
 - e. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan required by 40 CFR 63.342(f)(3), pursuant to 40 CFR 63.342(f)(3)(iv).
 - f. Records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 CFR 63.342(f)(3).
 - g. Copies of test reports documenting results of all performance tests and all measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 CFR 63.344(e).
 - h. Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.

- i. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data. Records of excess emissions that occurs during malfunction of the process, control, or monitoring equipment.
 - j. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data. Records of excess emissions that occurs during periods other than malfunction of the hard chrome electroplating tanks and associated control device or monitoring equipment.
 - k. Records for the total process operating time of the hard chrome electroplating tank(s) during the reporting period.
 - l. Records demonstrating the maximum cumulative potential rectifier capacity, if hard chrome electroplating is less than 60 million ampere-hours per year, or of the actual cumulative rectifier capacity of hard chromium electroplating tank(s) at a facility expended during each month and the total capacity expended semiannually.
 - m. Copies of the notifications and reports required by 40 CFR Parts 63.9, 63.10, and 63.347 (Conditions 9, 10, and 11), with supporting documentation.
 - n. All records shall be retained for a period of five years, pursuant to 40 CFR 63.10(b) (1).
9. The Permittee shall comply with the initial notification requirements of 40 CFR 63.347(c), including the following:
- a. The Permittee shall submit notification of commencing construction/reconstruction to the Illinois EPA including the date of construction or reconstruction within 30 calendar days after the commencement date.
 - b. The notification shall contain the following:
 - i. The name, title, and address of the owner or operator.
 - ii. The address (i.e., physical location) of each hard chrome electroplating tank.
 - iii. A statement that the basis for this notification is the National Emission Standards, 40 CFR Part 63, Subpart N.
 - iv. Identification of the applicable emission limitation and compliance date for each hard chrome electroplating tank.
 - v. A brief description of each hard chrome electroplating tank, including the type of process operation performed.

- vii. A statement of whether the hard chrome electroplating tank(s) is located at a small or a large, hard chromium electroplating facility and whether this will be demonstrated through actual or maximum cumulative potential rectifier capacity.
 - viii. A statement of whether the owner or operator of a hard chrome electroplating tank(s) will limit the maximum cumulative potential rectifier capacity in accordance with 40 CFR 63.342(c)(2) such that the hard chromium electroplating facility is considered small.
 - ix. A statement of whether the hard chrome electroplating tank(s) is located at a major source or an area source as defined in 40 CFR 63.2 of Subpart A.
 - A. A notification of the date when construction or reconstruction was commenced, shall be submitted simultaneously with the notification of construction or reconstruction.
 - B. A notification of the date when construction or reconstruction was commenced, shall be submitted no later than 30 calendar days of construction or reconstruction commencement date.
 - C. A notification of the actual date of startup of the source shall be submitted within 30 calendar days after such date.
10. The Permittee shall comply with the compliance reporting requirements of 40 CFR 63.347(e), including the following:
- A notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the hard chrome electroplating tank(s) has complied with Subpart N, pursuant to 40 CFR 63.347(e)(2). The notification shall list the following:
- a. The applicable emission limitation and the methods that were used to determine compliance with this limitation.
 - b. The performance test report documenting the results of the performance test, which contains the elements required by 40 CFR 63.344(a), including measurements and calculations to support the special compliance provisions of 40 CFR 63.344(e) if these are being followed, pursuant to 40 CFR 63.344(e)(5).
 - c. If the Permittee had previously submitted emission estimates, the Permittee shall state that this report corrects or verifies the previous estimate.
 - d. The specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit, pursuant to 40 CFR 63.343(c).

- e. The methods that will be used to determine continuous compliance.
 - f. A description of the air pollution control technique for each emission point.
 - g. A statement that the Permittee has completed and has on file the operation and maintenance plan as required by the work practice standards of 40 CFR 63.342(f).
 - h. If the Permittee is determining facility size based on actual cumulative rectifier capacity in accordance with 40 CFR 63.342(c)(2), records to support that the facility is small.

Records of projected rectifier capacity for the first 12-month period of tank operation shall be used.
 - i. A statement by the Permittee of the hard chrome electroplating tank(s) as to whether the source has complied with the provisions of 40 CFR Part 63, Subpart N.
- 11a. The Permittee shall prepare an ongoing compliance status report every year and retain the report on site, and make the report available to the Illinois EPA upon request, pursuant to 40 CFR 63.347(h). However, if both of the following conditions are met, semiannual reports shall be prepared and submitted to the Illinois EPA:
- i. The total duration of excess emissions (as indicated by the monitoring data) is 1 percent or greater of the total operating time for the reporting period; and
 - ii. The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.
- b. The ongoing compliance status report shall contain the following:
- i. The company name and address of the source performing hard chrome electroplating.
 - ii. An identification of the operating parameter(s) that is monitored for compliance determination, as required by 40 CFR 63.343(c).
 - iii. The relevant emission limitation for the hard chrome electroplating tank(s), and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status, as required by 40 CFR 63.347(e)(2).
 - iv. The beginning and ending dates of the reporting period.
 - v. A description of the type of process performed in the hard chrome electroplating tank(s).

- vi. The total operating time of the hard chrome electroplating tank(s) during the reporting period.
 - vii. The actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis, if the Permittee limits the maximum cumulative potential rectifier capacity less than 60 million amp-hr/yr.
 - viii. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes.
 - ix. A certification by a responsible official that the work practice standards of 40 CFR 63.342(f) were followed in accordance with the operation and maintenance plan for the source.
 - x. If the operation and maintenance plan required by 40 CFR 63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by 40 CFR 63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed.
 - xi. A description of any changes in monitoring, processes, or controls since the last reporting period.
 - xii. The name, title, and signature of the responsible official who is certifying the accuracy of the report.
 - xiii. The date of the report.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing, or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276


and one (1) copy shall be sent to the Illinois EPA's regional office at the following address, unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Eisenhower Tower
1701 South First Avenue
Maywood, Illinois 60153

Page 10

13. This permit is issued based on negligible emissions of particulate matter from nickel stripping tank controlled by demister and caustic stripping tank controlled by demister. For this purpose emissions from all such sources shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.

If you have any questions on this permit, please call Jason Schnepf at 217/782-2113.



Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JMS:jar

cc: Region 1
Illinois EPA, Compliance Section



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

**STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emissions of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

**Directory
Environmental Protection Agency
Bureau of Air**

September 1, 1992

**For assistance in preparing a permit application,
contact the Permit Section:**

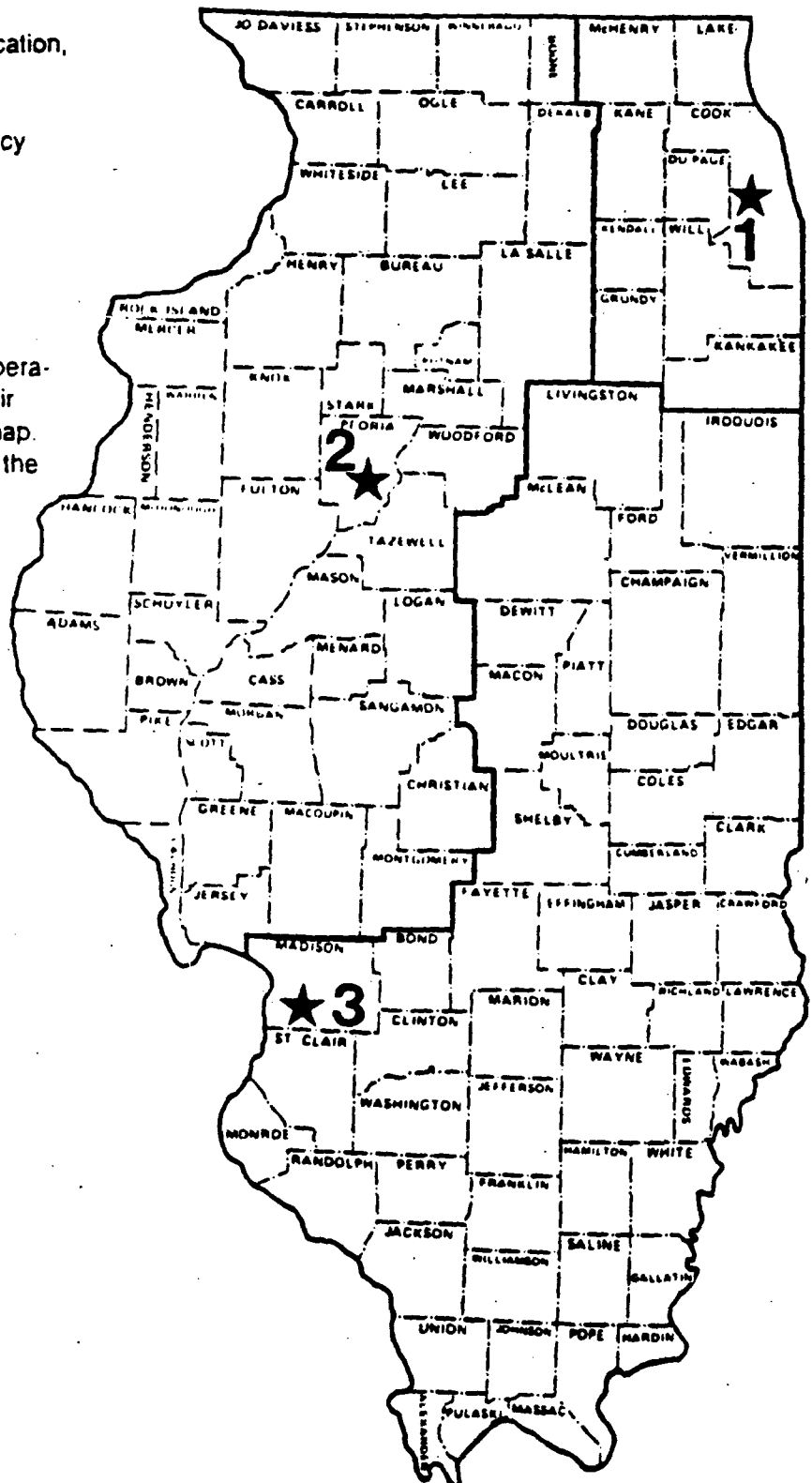
Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
2200 Churchill Road
Springfield, Illinois 62706
217/782 2113

Or contact a regional office of the Field Operations Section. The regional offices and their areas of responsibility are shown on the map. The addresses and telephone numbers of the regional offices are as follows:

**Illinois EPA
Region 1
Intercontinental Center
1701 South 1st Avenue
Maywood, Illinois 60153
708/531-5900**

Illinois EPA
Region 2
5415 North University
Peoria, Illinois 61614
309/693-5461

**Illinois EPA
Region 3
2009 Mall Street
Collinsville, Illinois 62234
618/346-5120**



DOWNERS GROVE SANITARY DISTRICT

Discharge Permit Number 16
Issuance Date: November 20, 1997
Expiration Date: November 20, 2002

Permittee Name: Bales Mold Service

Permittee Address: 2824 Hitchcock Avenue
Downers Grove, Illinois 60515

Name of Premise Permitted: Bales Mold Service

Location of Premise Permitted: 2824 Hitchcock Avenue
Downers Grove, Illinois 60515

In accordance with the provisions of Article II(A), Section 400, of the District's Sewer Use Ordinance, the above designated Permittee is hereby authorized to discharge industrial wastewater from the above facility and through the discharge lines identified herein, into the sanitary sewer system of the Downers Grove Sanitary District subject to said Permittee's compliance with applicable pretreatment standards, District ordinances, and the terms and conditions of this permit. The Permittee is not authorized to discharge wastewater to the District except by permit. Compliance with this permit does not relieve the Permittee of its obligations to comply with any and all applicable pretreatment regulations, standards or requirements under local, state, or Federal laws, including any such regulations, standards, requirements, or laws that become effective during the term of this permit.

Non compliance with any term or condition of this permit shall constitute a violation of the Downers Grove Sanitary District's Sewer Use Ordinance.

The Permittee is not authorized to discharge after the above expiration date or the expiration date of any renewal of this permit. The Permittee shall submit to the District such information, forms and fees as are required in accordance with Article II(A), Section 400.105(e), as application for permit renewal, a minimum of ninety (90) days prior to the expiration date.

DOWNERS GROVE SANITARY DISTRICT

By: Lawrence C. Cox

Lawrence C. Cox, District General Manager

I. Description of the Permitted Discharge

The permitted industrial facility contains processes for plating and finishing of plastic extrusion molds. Plating is done using hard chrome and electroless nickel. The molds plated are 100% on a job shop basis.

No process wastewater is discharged to the sanitary sewer. Plated molds are rinsed in a closed loop system, with the water used to make up for evaporative losses in the plating tanks. The total discharge for the building is estimated at 750 gallons per day.

The point of discharge to the sanitary sewer system is 15 feet west of District Manhole Number 3-A-62. An inspection manhole exists on the discharge line from the building. This manhole shall be designated 001, and is the correct sampling point for monitoring compliance with the permit discharge limitations.

II. Discharge Limitations

A. This facility's process is governed by the Federal Categorical Standards for the Electroplating Industry (40 CFR Part 413). Any wastewater discharged from the plating process or associated processes must meet the following concentration limitations at the point of discharge within the facility, before mixing with any other wastestream:

NOTE: As of the date of this permit, the facility does not discharge any process wastewater to the sanitary sewer system. Therefore this discharge condition does not apply, and unless future requirements change, no monitoring is required under this section.

| <u>Pollutant</u> | <u>Daily Maximum</u> <u>(mg/L)</u> | <u>Maximum</u> <u>4-Day Average</u> <u>(mg/L)</u> |
|----------------------------|---------------------------------------|---|
| Cadmium | 1.2 | 0.7 |
| Lead | 0.6 | 0.4 |
| Cyanide (amenable) | 5.0 | 2.7 |
| Total Toxic Organics (TTO) | 4.57 | --- |

B. The total wastewater flow from the building to the sanitary sewer system shall meet the following specific limitations, at the inspection manhole location, based on a 24 hour composite sample:

| <u>Pollutant</u> | <u>Limit</u> | <u>Pollutant</u> | <u>Limit</u> |
|----------------------|--------------|------------------|--------------|
| Cadmium, total | 1.62 mg/L | Lead, total | 3.84 mg/L |
| Chromium, trivalent | 15.1 mg/L | Mercury, total | 0.0005 mg/L |
| Chromium, hexavalent | 3.0 mg/L | Nickel, total | 8.6 mg/L |
| Copper, total | 3.38 mg/L | Silver, total | 0.57 mg/L |
| Cyanide, total | 1.74 mg/L | Zinc, total | 2.61 mg/L |

C. Spent plating solutions, precipitates, sludges, filter residues and solvents shall not be discharged to the District's system but shall be disposed of or reclaimed by an approved method.

D. All discharges from this facility shall be in compliance with the ordinances of the District, the statutes of the State of Illinois, and the regulations of the U.S. Environmental Protection Agency, and the Illinois Environmental Protection Agency.

E. The discharge from this facility shall not produce any adverse effects on the District sanitary sewer service that would endanger private or public property, the public health, the integrity of the receiving stream, the District's collection system, and/or the treatment processes of the District Wastewater Treatment Center.

III. Self-Monitoring and Reporting Requirements

A. The Permittee shall sample and analyze wastewater at the specific locations, for the parameters, frequencies and sample types described herein:

| <u>Parameter</u> | <u>Location</u> | <u>Frequency</u> | <u>Sample Type</u> |
|--|-----------------|------------------|--|
| Copper (T) Chromium (T) Lead (T) Nickel (T) Zinc (T) | Manhole 001 | Semi-annual | 24 hour composite |
| Cyanide (T) | Manhole 001 | Semi-annual | 1 grab sample collected during the same 24 hour sampling period the sample for metals is collected |

(T) indicates Total value for the pollutant

and any additional parameters which are required to assure compliance with the limitations specified in Section II, Subparagraphs A through E.

All samples must be preserved at the time of collection, in accordance with 40 CFR Part 136 and shall be representative of the volume and nature of the discharge.

B. The District reserves the right to adjust the Permittees sampling frequency, sample types and parameters based on the submitted self monitoring data, District monitoring, inspections of the Permittees' facility and amendments to the District's Sewer User Ordinance.

C. At the request of the District, the Permittee shall provide splits on samples collected for self monitoring purposes.

D. The results of the self monitoring activities described in Section III(A) shall be reported to the District semiannually. These reports shall be submitted in accordance with the following schedule:

| <u>Monitoring Period</u> | <u>Report Due Date</u> |
|----------------------------|------------------------|
| January 1 through June 30 | July 20 |
| July 1 through December 31 | January 20 |

E. These reports shall include the following information:

- 1) Results of monitoring and analysis required in Section III(A), including the sample location, date and sample type;
- 2) The name, address, and telephone number for the laboratory doing the sampling and analysis, and the name of a contact person at the lab;
- 3) The report shall be signed by an Authorized Agent for the Permittee;
- 4) Certification that the report is complete and accurate as submitted shall be included, utilizing the following certification statement:

"I have personally examined and am familiar with the information submitted in the attached document and I hereby certify under penalty of law that this information was obtained in accordance with the requirements of 403.12(e). Moreover, based on my inquiry of those individuals immediately responsible for obtaining the information herein, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of imprisonment."

- 5) Certification that no prohibited materials were discharged and that the spill control plan is being implemented as submitted shall be provided with each report, using the following statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standards for toxic organics and prohibited materials, I certify that to the best of my knowledge and belief, no toxic or prohibited materials have been discharged since filing the last self monitoring report. I further certify that this facility is implementing the Spill Control plan submitted to the District."

F. The Permittee shall notify the District within 24 hours of their being informed by a laboratory doing the analyses for self monitoring, that a sample exceeded a permit limit. Resampling shall then be scheduled to allow for follow up sampling within 30 days of the violation, to determine if the discharge has returned to compliance.

G. The Permittee shall notify the District immediately, by telephone, upon any accidental or slug discharge to the District's system. The permittee shall follow up with a written report within five (5) days of the incident, fully describing what occurred, who was notified, how the spill was cleaned up and disposed of, and what measures will be taken to prevent a reoccurrence. By ordinance, a slug is defined for a permit limited pollutant as a concentration five times or more, the stated limit as measured by a grab sample, or a pollutant at a concentration which either interferes with the treatment process or passes through it to the receiving stream.

*grab
24 Hour
Co
info -
Jim n Steve
insert
on
new
form*

sig.
*insert
on new
form*
sig.

H. If the Permittee analyzes any parameters listed in Section III (A) at a frequency greater than is specified, using the methods described in 40 CFR Part 146, or other approved methods, then the Permittee shall report all results to the District in the semiannual monitoring reports.

I. All measurements, tests, and analyses to which reference is made in this permit shall be determined and performed in accordance with the procedures established by the USEPA Administrator pursuant to Section 304 (g) of the Clean Water Act and contained in 40 CFR Part 136 and amendments thereto or with other test procedures approved by the USEPA Administrator. Sampling shall be performed in accordance with the techniques approved by the USEPA Administrator. Where 40 CFR Part 136 does not include sampling or analytical techniques for the pollutants in question or where the USEPA Administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any sampling and analytical procedures approved by the USEPA Administrator.

J. When a compliance schedule has been included as part of the permit, or amended to it, a Pretreatment Compliance Schedule Progress Report shall be submitted to the District no later than fourteen (14) days after the scheduled date for each increment of progress. At a minimum, these reports shall include whether the increment of progress has been complied with, and if not, the date which the permittee expects to comply with the increment of progress, and the steps being taken to return to the established schedule.

IV. Permit Compliance

A. The permittee shall install and maintain any equipment and implement any measures as are required to maintain compliance with the discharge limitations stated in Section II, subparagraphs A through E.

B. In the event the Permittee does not comply with the conditions of this permit, the District General Manager shall notify the Permittee in writing of the specific violation of this permit. The Permittee shall be given ten (10) working days from the receipt of aforementioned notification to respond to the District in writing, detailing steps taken or to be taken by the Permittee to prevent a reoccurrence of the cited violation. In the event the District General Manager determines that the Permittee's action will not prevent a reoccurrence of a violation of this permit, the General Manager will notify the Permittee in writing of the measures and/or devices that the Permittee must institute to comply with the conditions of this permit and the time period in which said measures and/or devices must be implemented. The above provisions are in addition to, not in lieu of any other enforcement remedies available to the District.

C. The permit shall be revoked due to any falsification or intentional misrepresentation by the permittee of any data or information required under this permit.

D. Penalties for failure to comply with the terms and conditions of this permit, or orders issued hereunder shall include fines of at least \$100 but no more than \$ 1,000 per day per violation. The District may seek to recover costs of monitoring and analyses caused by such violations and the costs of any actual damage incurred by the District.

V. General Conditions

A. All discharges authorized herein shall be consistent with the terms and conditions of this permit. In the event the type, quality or volume of wastewater from this facility is expected to materially and substantially change, the Permittee shall give a thirty (30) day notice in writing to the District and shall make new application to the District prior to said change. The Permittee shall not materially or substantially change the type, quality or volume of its wastewater beyond that allowed by the permit, without prior approval from the District.

B. The Permittee shall allow representatives of the Downers Grove Sanitary District, upon presentation of credentials, ready access for the purposes of inspection, sampling, records examination, or other tasks necessary to monitor and insure compliance by the Permittee with the terms and conditions of this permit. The Permittee hereby licenses the District the right to use the existing roadway, parking lot and surface areas of the Permittee's facility for the purpose of collecting samples and making inspections of the wastewater discharges to the District's system.

C. All monitoring reports required under this permit will be available for public inspection at District offices.

D. The Permittee shall retain for a minimum of three (3) years and afford the District access to any and all records of monitoring activities and results related to wastewater discharges from the subject facility.

E. This permit is issued to the named Permittee for the specific operations permitted and is not transferable or assignable without the approval of the District.

F. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any State, Federal, or local laws.

G. In the event a court of competent jurisdiction determines that any portion of this permit is invalid, such a determination shall not affect the validity of the remaining portions of this permit.

VI. Term of Permit

The term of this permit shall be from the issuance date of this permit to the stated expiration date. Provided, however, that the permit is contingent upon the issuance of an NPDES permit to the District. Provided further, that in the event a valid law, regulation, or ordinance requires the amendment of the terms and conditions of this permit, prior to its anticipated expiration date, the District may amend this permit upon thirty (30) days written notice to the Permittee.

REPORTING REQUIREMENT SUMMARY

| <u>Item</u> | <u>Due at DGSD</u> |
|--|--|
| 1. Semi-Annual Self Monitoring Reports | By the twentieth day of January and July each year. |
| 2. Spill or slug Discharge Reports | Notify the District's Laboratory Director, Janet Buchner, or Operations Director, Ralph Smith by telephone as soon as possible after the spill or slug discharge is discovered. A written report must be submitted to and received by the DGSD within five calendar days of the telephone notification |
| 3. Compliance Reports | Submitted within 14 calendar days after the scheduled completion of an increment of progress listed in the compliance schedule. |
| 4. Process or Flow Changes | Submitted to and received by the DGSD within 30 calendar days prior to any changes at which time re-application shall be made for the Industrial Discharge Permit. |
| 5. Permit Renewal Application <i>Jan 2002</i> | Submitted to and received by the DGSD 90 days in advance of current permit expiration. |

All reports should be mailed to

Janet Buchner
Laboratory Services Director

DOWNERS GROVE SANITARY DISTRICT
2710 Curtiss Street
Downers Grove, Illinois 60515

DGSD Telephone Contacts

Mon-Fri, 8:00 a.m. - 4:00 p.m.....969-0664....Laboratory Services Director

During non-business hours, weekends and holidays, call the same number, 969-0664 and leave a message with the answering service for the person on call.

BOARD OF TRUSTEES

Donald E. Eckmann
President

Wallace D. Van Buren
Vice-President

George Mitchel
Clerk

Downers Grove Sanitary District

2710 Curtiss Street
P.O. Box 1412
Downers Grove, IL 60515-0703
Phone: 630-969-0664
Fax: 630-969-0827

STAFF

Lawrence C. Cox
General Manager

Ralph E. Smith, Jr.
Operations Director

Sheila K. Henschel
Administrative Services
Director

LEGAL COUNSEL

Michael C. Wiedel

*Providing a Better Environment for South Central
DuPage County*

January 16, 1998
Steven Bales
Vice President
Bales Mold Service
2824 Hitchcock
Downers Grove, Illinois 60515

Dear Mr. Bales:

The District has recently made revisions to its Industrial Pretreatment Program, as required by USEPA. Specifically these changes were a re-evaluation of the District's ordinance limits for toxic pollutants. The old limits had been in place since 1985 and needed to be updated to reflect regulatory and operational changes.

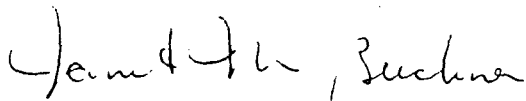
Two copies of this permit revision are enclosed. In summary, arsenic and selenium have been added to the list of pollutants with specific local limits. All the other listed pollutant parameters have limits that were revised downward, except for silver, which remains at 0.57 mg/L.

Please review the limit changes and attach the permit revision to the complete permit. With good pollution prevention, your facility should be able to meet these new limits. They become enforcement limits 30 days after this notice, February 16, 1998.

Please feel free to call me if you have any questions.

Sincerely,

DOWNERS GROVE SANITARY DISTRICT



Janet M. Buchner
Laboratory Services Director

Enclosure

DOWNERS GROVE SANITARY DISTRICT

Discharge Permit Number 16

Issuance Date: November 20, 1997

Expiration Date: November 20, 2002

Revision Date: January 15, 1998

Permittee Name: Bales Mold Service, Inc.

Permittee Address: 2824 Hitchcock
Downers Grove, Illinois 60515

Name of Premise Permitted: Bales Mold Service, Inc.

Location of Permitted Premise: 2824 Hitchcock
Downers Grove, Illinois 60515

In accordance with the provisions of Section VI, Term of Permit, this permit is hereby revised to set the wastewater discharge limits to new values that have been approved by the District Board of Trustees. These limits replace the old limits entirely and become compliance limits 30 days from the date of this notice.

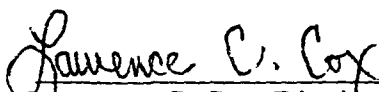
Section II(B) of the permit shall be entirely replaced by the following:

Section II(B). The total discharge flow from this facility to the sanitary sewer system shall not exceed the following specific limitations at Outfall 001, based on a twenty- four (24) hour composite sample:

| <u>Pollutant</u> | <u>Limit</u> | <u>Pollutant</u> | <u>Limit</u> |
|----------------------|--------------|------------------|--------------|
| Arsenic, Total | 0.52 mg/L | Lead, Total | 2.15 mg/L |
| Cadmium, Total | 0.28 mg/L | Mercury, Total | 0.033 mg/L |
| Chromium, Total | 14.0 mg/L | Nickel, Total | 4.27 mg/L |
| Chromium, Hexavalent | 0.81 mg/L | Selenium, Total | 0.43 mg/L |
| Copper, Total | 2.54 mg/L | Silver, Total | 0.57 mg/L |
| Cyanide, Total | 1.34 mg/L | Zinc, Total | 2.61 mg/L |

pH shall be in the range of 5.5 – 9.0 Standard Units, for any grab sample.

DOWNERS GROVE SANITARY DISTRICT



Lawrence C. Cox, District General Manager

DOWNERS GROVE SANITARY DISTRICT

Discharge Permit Number 16

Issuance Date: November 20, 1997

Expiration Date: November 20, 2002

Revision Date: January 15, 1998

Permittee Name: Bales Mold Service, Inc.

Permittee Address: 2824 Hitchcock
Downers Grove, Illinois 60515

Name of Premise Permitted: Bales Mold Service, Inc.

Location of Permitted Premise: 2824 Hitchcock
Downers Grove, Illinois 60515

In accordance with the provisions of Section VI, Term of Permit, this permit is hereby revised to set the wastewater discharge limits to new values that have been approved by the District Board of Trustees. These limits replace the old limits entirely and become compliance limits 30 days from the date of this notice.

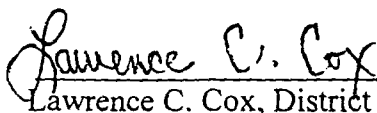
Section II(B) of the permit shall be entirely replaced by the following:

Section II(B). The total discharge flow from this facility to the sanitary sewer system shall not exceed the following specific limitations at Outfall 001, based on a twenty- four (24) hour composite sample:

| <u>Pollutant</u> | <u>Limit</u> | <u>Pollutant</u> | <u>Limit</u> |
|----------------------|--------------|------------------|--------------|
| Arsenic, Total | 0.52 mg/L | Lead, Total | 2.15 mg/L |
| Cadmium, Total | 0.28 mg/L | Mercury, Total | 0.033 mg/L |
| Chromium, Total | 14.0 mg/L | Nickel, Total | 4.27 mg/L |
| Chromium, Hexavalent | 0.81 mg/L | Selenium, Total | 0.43 mg/L |
| Copper, Total | 2.54 mg/L | Silver, Total | 0.57 mg/L |
| Cyanide, Total | 1.34 mg/L | Zinc, Total | 2.61 mg/L |

pH shall be in the range of 5.5 – 9.0 Standard Units, for any grab sample.

DOWNERS GROVE SANITARY DISTRICT



Lawrence C. Cox, District General Manager

Exhibit

I

**TOTAL CHROMIUM EMISSIONS
TEST REPORT**

Performed for:

**BALES MOLD SERICE, INC.
DOWNERS GROVE, ILLINOIS**

Performed By:

**RMC Environmental, Inc.
Project Number: 99-028-311**

Prepared by:

**BALES MOLD SERVICE, INC.
DOWNERS GROVE, ILLINOIS**

Submitted By:

**RMC Environmental, Inc.
PO Box 1008
Elgin, Illinois 60121-1008**

RMCEI Reference Number: 99-028-311

August 19, 1999

**TOTAL CHROMIUM EMISSIONS
TEST REPORT**

For

**Bales Mold Service, Inc.
Downers Grove, Illinois**

Table of Contents

| | | |
|------------|---|------------|
| 1.0 | PROJECT SUMMARY | 1-1 |
| 1.1 | Source Information..... | 1-1 |
| 1.2 | Testing Firm Information..... | 1-1 |
| 1.3 | Test Information..... | 1-1 |
| 2.0 | SUMMARY OF RESULTS | 2-1 |
| 3.0 | TEST PROCEDURES AND EMISSIONS DETERMINATION..... | 3-1 |
| 3.1 | Test Procedures..... | 3-1 |
| 3.2 | Emissions Determinations..... | 3-1 |

Appendix A - Reference Measurement Data With Emission Rate Calculations

Appendix B - Field Data Sheets For Total Chromium

Appendix C - Analytical Data For Total Chromium Analysis

Appendix D - Reference Measurement Performance Checks and Calibration, Chain Of Custody and QA/QC Documentation

1.0 PROJECT SUMMARY

1.1 Source Information

Plant Name and Address: Bales Mold Service, Inc.
2824 Hitchcock Avenue
Downers Grove, Illinois 60515

Units Tested: Small hard chrome tank scrubber

1.2 Testing Firm Information

Firm Name and Address: RMC Environmental, Inc.
PO Box 1008
Elgin, Illinois 60121-1008

Firm Contact: Rachel Chleborowicz - Project Manager

Telephone Number: 800-532-3391 Voice
815-226-9542 Fax

1.3 Test Information

Test Requested By: Bales Mold Service, Inc.

Firm Contact: Mr. Steven Bales

Telephone Number: 630-852-4665 Phone
630-852-4687 Fax

Test Objective: Conduct total chrome, moisture and flow rate testing on plating tanks in accordance with the MACT regulations and EPA Method 306 (40 CFR 63, Appendix A).

Test Methods: EPA Methods 1, 2, 3b, 4 and 306

Test Date: August 19, 1999

Test Coordinators: Mr. Steven Bales

Test Personnel: Rachel Chleborowicz - Project Manager

2.0 SUMMARY OF RESULTS

The results of the emissions retesting performed on the large chrome tank stacks are presented in **Table 2-1**. Detailed results of all of the testing completed on this location are located in **Appendix A**. The field data and the analytical results are presented in **Appendix B** and **C**, respectively. Calibration sheets and equipment performance checks are presented in **Appendix D**, along with the chain of custody.

A cyclonic flow check was performed at the sampling location to determine the existence of abnormal flow. The observed average yaw angle for the scrubber exit was 5°. Section 2.5 of EPA Method 1 indicates that a sampling location with an average yaw angle of $\leq 20^\circ$ is acceptable. An extension was added to this stack to give the stack the added height to meet the minimum requirements for EPA Method 1. As indicated by the average of the three test runs, the concentrations of the chromium emissions were below the MACT regulation standards of 0.015 mg/DSCM for composite mesh pad scrubber systems on hard chrome plating tanks.

TABLE 2-1
SUMMARY OF TOTAL CHROMIUM RESULTS

Bales Mold Service, Inc.
August 19, 1999

| Location | Test Parameter | Result | Specification |
|------------------|----------------------------|----------------|--|
| Scrubber Unit #2 | mg/DSCM Flow rate DSCFM | 0.007 4,967 | ≤ 0.030 mg/DSCM for small hard chrome plating sources |

3.0 TEST PROCEDURES AND EMISSIONS DETERMINATIONS

The sampling and analytical requirements for this program include the determination of total chrome, O_2/CO_2 , moisture and volumetric flowrates from the stack effluent. The plating process was operated at 100% capacity. Figure 3-1 illustrates the sampling system used for the total chrome testing. The specific equipment and procedures that were used are detailed below.

3.1 Test Procedures

Total chrome compliance testing was completed on the exhaust stacks from the chrome plating tanks. The compliance testing consisted of three two-hour test runs utilizing EPA Methods 1, 2, 3B (40 CFR 60, Appendix A) and 306 (40 CFR 63, Appendix A).

The number and location of the sampling points were determined according to the procedures outlined in EPA Method 1. The exhaust stack cross section was divided into 24 equal areas with 12 sampling points on each to two axes. A cyclonic flow check was performed at the sampling location to determine the flow angles at each point. An S-type pitot, oil manometer, and an angle finder were used for these determinations. At each point, the Pitot was positioned at a right angle to the flow, the pitot was then rotated until a null reading was obtained. The angles of rotation were then noted.

The flue gas velocity and volumetric flow rates were determined according to EPA Method 2. Velocity head measurements (ΔP) were made using an S-type Pitot tube conforming to the geometric specifications indicated in Method 2 and each Pitot has been assigned a coefficient of 0.84. The differential pressures were measured using an oil manometer of the appropriate range. Flue gas temperatures were obtained with chromel-alumel thermocouples equipped with a digital readout.

The composition of the flue gas was determined utilizing the procedures outlined in Method 3B. The percent moisture content of the flue gas was obtained from the amount of moisture collected in the Method 306 sampling train. Analysis for carbon dioxide and oxygen were performed using a Fyrite analyzer and the analytical results were used in the calculation of flue gas composition and molecular weight.

3.2 Emissions Determinations

The total chrome samples were drawn isokinetically from the source using an EPA method 306 sampling train. The sampling train consisted of a glass nozzle and probe liner, an attached Type S Pitot tube, four glass impinger chilled and a metering console. No filter is used for this method.

The first impinger is left empty, the second and third impingers contain 100 ml of 0.1 N sodium hydroxide (NaOH) in place of water, and the fourth impinger contains 200g of preweighed silica gel for moisture removal. Each of the twenty-four points were sampled for 5 minutes resulting in a net run time of 120 minutes.

After sampling, the reagents were returned to their original container, weighed, the weights recorded on the label and the liquid level marked. The silica gel was returned to the original container, weighed and the weight recorded on the label. The volume of water vapor condensed in the impingers and the volume of water collected in the silica gel were summed and entered into the moisture content calculations. All sampling components exposed to the effluent were rinsed

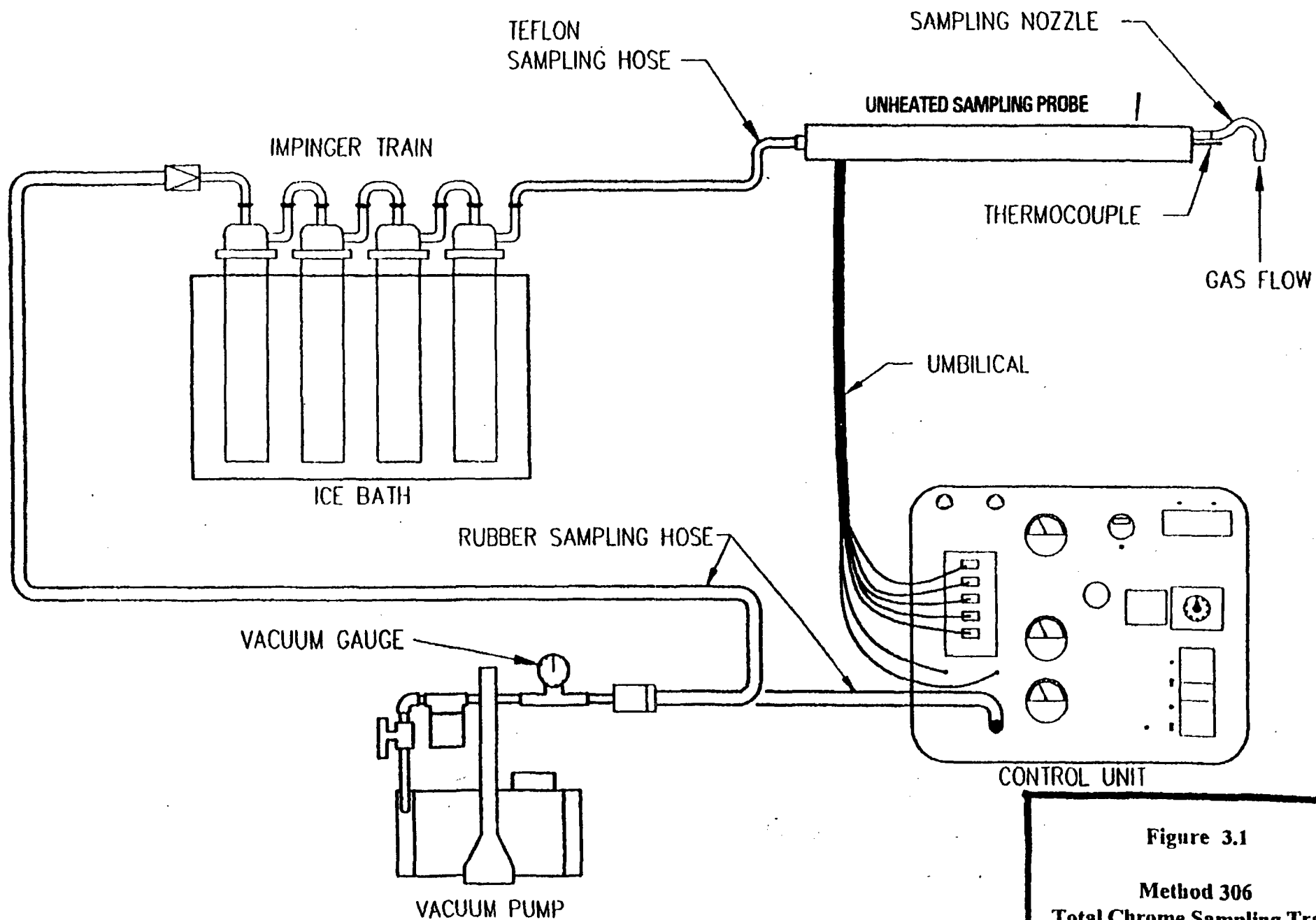


Figure 3.1
Method 306
Total Chrome Sampling Train

three time with NaOH and the rinses were added to the reagent containers.

The combined samples and rinses were analyzed for total chrome using ion chromatography (IC) coupled with a post-column reactor (PCR).

Appendix A - Reference Measurement Data With Emission Rate Calculations

RMC Environmental, Inc.
Emissions Testing & Consulting

Plant: Bales Mold Service
Project #: 99-028-311
Location: Downers Grove, IL - Scrubber #2

Date: 09/01/99

Sample Identification
Test Date

S2-M306-1 S2-M306-2 S2-M306-3
08/19/99 08/23/99 08/23/99

| | | | | | |
|--------|--|------------|--------|--------|--------|
| Start | | | 730 | 945 | 1155 |
| Finish | | | 935 | 1150 | 1400 |
| Total | | | 120 | 120 | 120 |
| Cp | Pitot Coefficient | (CF) | 0.84 | 0.84 | 0.84 |
| A | Area of stack | sq. inches | 254.5 | 254.5 | 254.5 |
| Pbar | Barometric Pressure | (in HG) | 29.92 | 29.91 | 29.87 |
| Wm | Volume of Condensate | (mg) | 35.7 | 33.3 | 35.1 |
| Ts | Temperature of Effluent | (F) | 68.4 | 70 | 70.8 |
| Pavg | Average Delta P | | 0.777 | 0.708 | 0.686 |
| Pg | Static Pressure | (in H2O) | 0.79 | 0.61 | 0.39 |
| DH | Delta H, Orifice pressure differential | (in H2O) | 1.19 | 1.09 | 1.06 |
| Tm | Meterbox Temperature | (F) | 72.9 | 79.8 | 82.7 |
| Vm | Volume of sample metered | (CF) | 73.221 | 70.629 | 69.862 |
| Y | Meter correction factor | | 1.0055 | 1.0055 | 1.0055 |
| Dn | Nozzle Diameter | (in) | 0.197 | 0.197 | 0.197 |
| CO2 | Percent Carbon Dioxide | (%) | 0.00 | 0.00 | 0.00 |
| O2 | Percent Oxygen | (%) | 20.90 | 20.90 | 20.90 |
| CO | Percent Carbon Monoxide | (%) | 0 | 0 | 0 |
| N2 | Percent Nitrogen | (%) | 79.10 | 79.10 | 79.10 |
| Ms | Molecular Weight (wet) | (lb/lb-m) | 28.59 | 28.60 | 28.58 |

DRAFT

Laboratory Results

| | | | | | |
|------------------------|-------------------------------|----------|----------|----------|--------|
| Total Chrome | (mg) | 1.41E-02 | 1.39E-02 | 1.40E-02 | |
| Ps | Absolute pressure of Flue Gas | (in HG) | 29.98 | 29.95 | 29.90 |
| Vwstd | Volume of Water Vapor | (SCF) | 1.68 | 1.57 | 1.65 |
| Vmstd | Volume of Metered Gas | (DSCF) | 73.131 | 69.600 | 68.381 |
| M | Moisture | (%) | 2.25 | 2.21 | 2.36 |
| Vs | Velocity | (FPS) | 49.71 | 47.53 | 46.88 |
| Qaw | Volumetric Flow | (ACFM) | 5,272 | 5,040 | 4,971 |
| Qsd | Volumetric Flow | (DSCF) | 5,159 | 4,916 | 4,825 |
| Chromium Concentration | (mg/DSCM) | 0.007 | 0.007 | 0.007 | |
| Chromium Concentration | (lb/Hr) | 1.31E-04 | 1.30E-04 | 1.30E-04 | |
| I | Isokenetic | (%) | 98.63 | 98.50 | 98.62 |

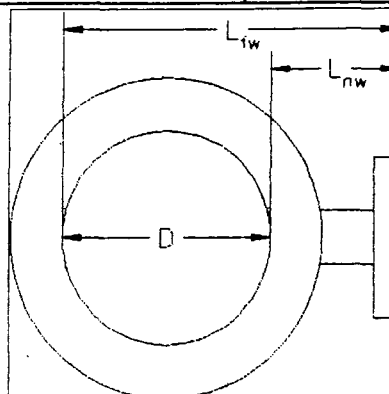
Appendix B - Field Data Sheets For Total Chrome

METHOD 1 - SAMPLE AND VELOCITY TRAVERSES FOR CIRCULAR SOURCES

| | | | |
|-------------------|-----------------------|----------------------|------------|
| Plant Name | Bales Mold Service | Date | 08/19/99 |
| Sampling Location | Unit 2 - New Scrubber | Project # | 99-028-311 |
| Operator | RMC | # of Ports Available | 2 |
| Stack Type | Circular | # of Ports Used | 2 |
| Stack Size | Small | Port Inside Diameter | 2.5 |

| Circular Stack or Duct Diameter | | | |
|--|--------------|-------|-----------------|
| Distance to Far Wall of Stack | (L_{fw}) | 18.00 | in |
| Distance to Near Wall of Stack | (L_{nw}) | 0.00 | in |
| Diameter of Stack ($=L_{fw} - L_{nw}$) | (D) | 18.00 | in |
| Area of Stack ($=3.14(D/2/C_{units})^2$) | (A_s) | 1.77 | ft ² |

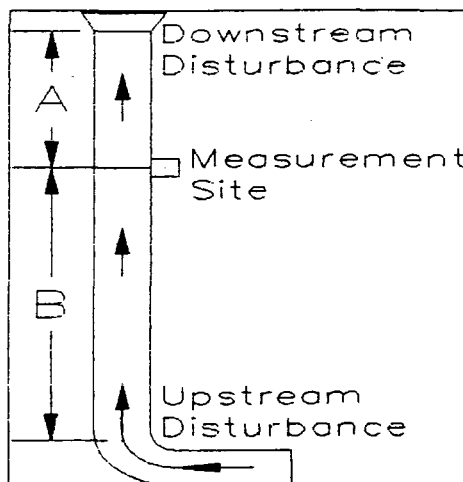
| Distance from Port to Disturbances | | | |
|------------------------------------|-----------|-------|-----------|
| Distance Upstream | (B) | 36.00 | in |
| Diameters Upstream ($=B/D$) | (B_D) | 2.00 | diameters |
| Distance Downstream | (A) | 17.00 | in |
| Diameters Downstream ($=A/D$) | (A_D) | 1.00 | diameters |



| Number of Traverse Points Required | | | |
|------------------------------------|-------------|--|----------------------|
| Diameters to Flow Disturbance | | Minimum Number of ¹ Traverse Points | |
| Up Stream | Down Stream | Particulate Points | Velocity Points |
| 2.00-4.99 | 0.50-1.24 | 24 | 16 |
| 5.00-5.99 | 1.25-1.49 | 20 | 16 |
| 6.00-6.99 | 1.50-1.74 | 16 | 12 |
| 7.00-7.99 | 1.75-1.99 | 12 | 12 |
| ≥ 8.00 | ≥ 2.00 | 8 or 12 ² | 8 or 12 ² |
| Upstream Spec | | 24 | 16 |
| Downstream Spec | | 24 | 16 |
| Traverse Pts Required | | 24 | 16 |

¹ Check Minimum Number of Points for the Upstream and Downstream conditions, then use the largest.

² 8 for Circular Stacks 12 to 24 inches
12 for Circular Stacks over 24 inches



| Number of Traverse Points Used | | | |
|--------------------------------|-------------|-------|----------|
| 2 | Ports by | 12 | Across |
| 24 | Pts Used | 24 | Required |
| FALSE | Particulate | FALSE | Velocity |

| Location of Traverse Points in Circular Stacks | | | | | | |
|--|---|------|------|------|------|------|
| Traverse Point Number | (Fraction of Stack Diameter from Inside Wall to Traverse Point) | | | | | |
| | Number of Traverse Points on a Diameter | | | | | |
| | 2 | 4 | 6 | 8 | 10 | 12 |
| 1 | .146 | .067 | .044 | .032 | .026 | .021 |
| 2 | .854 | .250 | .146 | .105 | .082 | .067 |
| 3 | | .750 | .296 | .194 | .146 | .118 |
| 4 | | .933 | .704 | .323 | .226 | .177 |
| 5 | | | .854 | .677 | .342 | .250 |
| 6 | | | .956 | .806 | .658 | .356 |
| 7 | | | | .895 | .774 | .644 |
| 8 | | | | .958 | .854 | .750 |
| 9 | | | | | .918 | .823 |
| 10 | | | | | .974 | .882 |
| 11 | | | | | | .933 |
| 12 | | | | | | .979 |

| Traverse Point Locations | | | |
|--------------------------|----------------------------|---------------------------|----------------------------------|
| Traverse Point Number | Fraction of Stack Diameter | Distance from Inside Wall | Distance Including Nipple Length |
| | | in | in |
| 1 | 0.021 | 3/8 | 3/8 |
| 2 | 0.067 | 1 2/8 | 1 2/8 |
| 3 | 0.118 | 2 1/8 | 2 1/8 |
| 4 | 0.177 | 3 1/8 | 3 1/8 |
| 5 | 0.250 | 4 4/8 | 4 4/8 |
| 6 | 0.356 | 6 3/8 | 6 3/8 |
| 7 | 0.644 | 11 5/8 | 11 5/8 |
| 8 | 0.750 | 13 4/8 | 13 4/8 |
| 9 | 0.823 | 14 7/8 | 14 7/8 |
| 10 | 0.882 | 15 7/8 | 15 7/8 |
| 11 | 0.933 | 16 6/8 | 16 6/8 |
| 12 | 0.979 | 17 5/8 | 17 5/8 |

CLIENT Bates Mold Service RUN NO. 52-306-01
 PLANT Downers Grove, IL JOB NO. 99-028-311 DATE 19 Aug 99
 CITY/STATE Unit 2 - Scrubber TIME START 730
 SAMPLING LOC. 29.92 STATIC PRESSURE, IN. H₂O + 0.79 TIME FINISH 935
 BAROMETRIC PRESSURE, IN. HG 7' 5" TEST PERSONNEL RMC
 LEAK J, VACUUM IN. HG 0.000 0.002 POSTTEST POS PRESS LEAK / OK?
 LEAK RATE, CFM

| • CONDUCT POSTTEST POSITIVE PRESSURE LEAK CHECK FOLLOWING THE LAST RUN PER LOCATION. FOR OTHER RUNS, ENTER "N/A". | | | | | | | | | |
|---|--------------------|-------------------------------|-------------------|-------------------------|--|--|---|--|--|
| EQUIPMENT CHECKS | | EQUIPMENT I.D. NUMBERS | | | | LEAK CHECKS | | | |
| <input checked="" type="checkbox"/> PITOT, PRETEST | REAGENT BOX | METER BOX <u>21-23</u> | | Y <u>1.0055</u> | | B | B | | |
| <input checked="" type="checkbox"/> PITOT, POSTTEST | PITOT <u>M-2-7</u> | CP | <u>0.84</u> NOZ'L | N-197 DIA. <u>0.197</u> | | E | E | | |
| <input checked="" type="checkbox"/> NOZZLE, PRE/POST | TC READOUT | TC PROBE | | UMBILICAL | | B | B | | |
| <input checked="" type="checkbox"/> TC <u>72</u> °F PRE | SAMPL'G BOX | ORISAT PUMP | | TEDLAR BAG | | E | E | | |
| <input checked="" type="checkbox"/> TC <u>64</u> °F POST | | | | | | B | B | | |
| <input checked="" type="checkbox"/> ORSAT SYSTEM | | | | | | E | E | | |
| | | MONOGRAPH DATA | | | | | | | |
| FILTER/XAD | TARE WT. | DELTA-HG | <u>1.7325</u> | | | B | B | | |
| | | METER TEMP. | <u>85</u> | | | E | E | | |
| | | EST. XH ₂ O | <u>2.0</u> | | | | | | |
| | | "CM" FACTOR | <u>0.997</u> | | | | | | |
| | | STACK TEMP. | <u>85</u> | <u>70</u> | | | | | |
| | | REF DELTA-P | <u>1.213</u> | <u>1.180</u> | | | | | |
| | | "KN" FACTOR | <u>1.517</u> | <u>1.56</u> | | | | | |
| | | Fyrites, % | <u>02</u> | <u>20.9</u> | | | | | |
| | | YOB | <u>0.984</u> | | | | | | |
| | | CO ₂ | <u>0.0</u> | | | ±5% OF CAL'D Y? (Y) <input checked="" type="checkbox"/> (N) <input type="checkbox"/> | | | |

| L I N E | SAMPLE POINT | CLOCK TIME, MINUTES | DRY GAS METER READING, CUBIC FEET | PITOT READING, IN. H ₂ O | GAS METER TEMP., °F | | STACK TEMP., °F | ORIFICE SETTING, IN. H ₂ O | | GAUGE VACUUM, IN. HG | GAS TEMPERATURES, °F | | | ✓ |
|------------------|-----------------|---------------------------|---|---|------------------------------|-----|-----------------------|--|-------|----------------------------|----------------------|-----------------|--------------------------|---|
| | | | | | IN | OUT | | ACTUAL | IDEAL | | FILTER | IMPING. EXIT | PROBE OR COND EXIT | |
| 1 | A-1 | 0 | 422.244 | 0.67 | 46 | 50 | 68 | 0.98 | 0.98 | 3.0 | N/A | 56 | N/A | ✓ |
| 2 | 2 | 5 | 424.97 | 0.72 | 65 | 62 | 68 | 1.08 | 1.08 | 3.0 | | 56 | | |
| 3 | 3 | 10 | 427.89 | 0.76 | 67 | 63 | 67 | 1.15 | 1.15 | 3.0 | | 56 | | |
| 4 | 4 | 15 | 430.87 | 0.78 | 69 | 63 | 67 | 1.18 | 1.18 | 4.0 | | 57 | | |
| 5 | 5 | 20 | 433.92 | 0.80 | 73 | 64 | 66 | 1.22 | 1.22 | 4.0 | | 57 | | |
| 6 | 6 | 25 | 438.01 | 0.82 | 75 | 65 | 68 | 1.24 | 1.24 | 4.0 | | 57 | | |
| 7 | 7 | 30 | 440.13 | 0.78 | 76 | 66 | 68 | 1.19 | 1.19 | 4.0 | | 58 | | |
| 8 | 8 | 35 | 443.18 | 0.77 | 76 | 66 | 69 | 1.17 | 1.17 | 3.0 | | 58 | | |
| 9 | 9 | 40 | 446.23 | 0.72 | 80 | 70 | 69 | 1.10 | 1.10 | 3.0 | | 58 | | |
| 10 | 10 | 45 | 449.17 | 0.68 | 82 | 70 | 69 | 1.04 | 1.04 | 3.0 | | 59 | | |
| 11 | 11 | 50 | 452.01 | 0.67 | 80 | 71 | 69 | 1.02 | 1.02 | 3.0 | | 58 | | |
| 12 | 12 | 55 | 454.85 | 0.61 | 80 | 70 | 68 | 0.94 | 0.94 | 3.0 | | 58 | | |
| 13 | B-1 | 60 | 457.551 | 0.70 | 80 | 70 | 68 | 1.07 | 1.07 | 3.0 | | 58 | | |
| 14 | 2 | 65 | 460.43 | 0.75 | 80 | 70 | 68 | 1.15 | 1.15 | 3.0 | | 58 | | |
| 15 | 3 | 70 | 463.42 | 0.80 | 80 | 70 | 69 | 1.23 | 1.23 | 4.0 | | 58 | | |
| 16 | 4 | 75 | 466.52 | 0.85 | 81 | 70 | 69 | 1.30 | 1.30 | 4.0 | | 59 | | |
| 17 | 5 | 80 | 469.69 | 0.87 | 81 | 71 | 69 | 1.33 | 1.33 | 4.0 | | 59 | | |
| 18 | 6 | 85 | 472.94 | 0.91 | 81 | 72 | 69 | 1.40 | 1.40 | 4.0 | | 59 | | |
| 19 | 7 | 90 | 476.25 | 0.94 | 81 | 73 | 69 | 1.44 | 1.44 | 4.0 | | 59 | | |
| 20 | 8 | 95 | 479.67 | 0.91 | 82 | 74 | 69 | 1.40 | 1.40 | 4.0 | | 59 | | |
| 21 | 9 | 100 | 483.03 | 0.85 | 82 | 74 | 69 | 1.31 | 1.31 | 4.0 | | 59 | | |
| 22 | 10 | 105 | 486.23 | 0.81 | 82 | 74 | 69 | 1.25 | 1.25 | 4.0 | | 59 | | |
| 23 | 11 | 110 | 489.38 | 0.80 | 83 | 75 | 69 | 1.23 | 1.23 | 4.0 | | 59 | | |
| 24 | 12 | 115 | 492.49 | 0.74 | 84 | 76 | 69 | 1.14 | 1.14 | 3.0 | | 60 | | |
| 25 | END | 120 | 495.465 | | | | | | | | | | | ✓ |

FINAL

* FILTER EXIT for NJ Method 1. FILTER BOX for all others.

** PROBE EXIT & J (probe & filter heat off) apply to NJ Method 1. COND-EXIT applies if sampling train has a condenser.

120 73.221 0.7774 72.9 68.4 1.189
 Min. (B) Vm (\sqrt{AP})² tm ts ΔH

%I= 100.2

CLIENT _____ PLANT Bales Mold Service RUN NO. U2-306-02
 CITY/STATE Dover, DE JOB NO. 99-028-311 DATE 8/18/99
 SAMPLING LOC. Unit 2 Scrubber TIME START 945
 BAROMETRIC PRESSURE, IN. HG 29.91 STATIC PRESSURE, IN. H₂O 0.61 TIME FINISH 1150
 LEAK J, VACUUM IN. HG 7" 5" TEST PERSONNEL RMC
 LEAK RATE, CFM 0.000 0.002 POSTTEST POS PRESS LEAK J OK? ✓

• CONDUCT POSTTEST POSITIVE PRESSURE LEAK CHECK FOLLOWING THE LAST RUN PER LOCATION. FOR OTHER RUNS, ENTER "N/A".

| EQUIPMENT CHECKS | | EQUIPMENT I.D. NUMBERS | | LEAK CHECKS | | |
|--|--------------------|--------------------------------------|-------------------------|---------------------------------------|-------------------------|----------------------------|
| <input checked="" type="checkbox"/> PITOT, PRETEST | REAGENT BOX _____ | METER BOX <u>71-23</u> | Y <u>1.0055</u> | B _____ | B _____ | |
| <input checked="" type="checkbox"/> PITOT, POSTTEST | PITOT <u>M-2-7</u> | Cp <u>0.84</u> | NOZ'L <u>N-197</u> | DIA. <u>0.197</u> | E _____ | |
| <input checked="" type="checkbox"/> NOZZLE, PRE/POST | TC READOUT _____ | TC PROBE _____ | UMBILICAL _____ | B _____ | B _____ | |
| <input checked="" type="checkbox"/> TC <u>73</u> °F PRE | SAMPL'G BOX _____ | ORSAT PUMP _____ | TEDLAR BAG _____ | E _____ | E _____ | |
| <input checked="" type="checkbox"/> TC <u>75</u> °F POST | NOMOGRAPH DATA | | | | B _____ | B _____ |
| <input checked="" type="checkbox"/> ORSAT SYSTEM | | | | | E _____ | E _____ |
| FILTER/XAD | TARE WT. | DELTA-H ₂ O <u>1.7325</u> | METER TEMP. <u>85</u> | EST. XH ₂ O <u>2</u> | "C" FACTOR <u>0.997</u> | STACK TEMP. <u>80</u> |
| | | REF DELTA-P <u>1.180</u> | "K" FACTOR <u>1.560</u> | Fyrites, % <u>0.2</u> | YOR <u>0.996</u> | CO ₂ <u>0.0</u> |
| | | | | 5% OF CAL'D Y? (Y) <u>✓</u> (N) _____ | | |

* * FLOWS DROPPED * *

| L N E | SAMPLE POINT | CLOCK TIME, MINUTES | DRY GAS METER READING, CUBIC FEET | PITOT READING, IN. H ₂ O | GAS METER TEMP., °F | STACK TEMP., °F | ORIFICE SETTING, IN. H ₂ O ACTUAL IDEAL | GAUGE VACUUM, IN. HG | FILTER * | IMPG. EXIT | PROBE OR COND EXIT** | ✓ |
|-------------|-----------------|---------------------------|---|---|------------------------------|-----------------------|--|----------------------------|-------------|---------------|----------------------------|---|
| 1 | A-1 | 0 | 495.737 | 0.64 | 72 73 | 69 | 0.98 0.98 | 3.0 | N/A | 51 | N/A | ✓ |
| 2 | 2 | 5 | 498.51 | 0.67 | 80 73 | 69 | 1.03 1.03 | 3.0 | | 52 | | |
| 3 | 3 | 10 | 501.37 | 0.71 | 81 73 | 69 | 1.09 1.09 | 3.0 | | 53 | | |
| 4 | 4 | 15 | 504.31 | 0.77 | 82 72 | 70 | 1.18 1.18 | 3.5 | | 53 | | |
| 5 | 5 | 20 | 507.38 | 0.76 | 83 74 | 70 | 1.17 1.17 | 3.5 | | 58 | | |
| 6 | 6 | 25 | 510.43 | 0.74 | 83 75 | 70 | 1.14 1.14 | 3.5 | | 58 | | |
| 7 | 7 | 30 | 513.46 | 0.72 | 84 75 | 70 | 1.09 1.09 | 3.5 | | 59 | | |
| 8 | 8 | 35 | 516.47 | 0.68 | 84 75 | 70 | 1.05 1.05 | 3.0 | | 59 | | |
| 9 | 9 | 40 | 519.35 | 0.67 | 85 75 | 70 | 1.03 1.03 | 3.0 | | 59 | | |
| 10 | 10 | 45 | 522.23 | 0.65 | 85 75 | 70 | 1.00 1.00 | 3.0 | | 59 | | |
| 11 | 11 | 50 | 525.03 | 0.64 | 85 75 | 70 | 0.99 0.99 | 3.0 | | 59 | | |
| 12 | 12 | 55 | 527.83 | 0.61 | 85 75 | 70 | 0.94 0.94 | 2.5 | | 59 | | |
| 13 | B-1 | 60 | 530.545 | 0.65 | 85 75 | 70 | 1.00 1.00 | 3.0 | | 59 | | |
| 14 | 2 | 65 | 533.34 | 0.69 | 86 76 | 70 | 1.07 1.07 | 3.0 | | 59 | | |
| 15 | 3 | 70 | 536.28 | 0.72 | 86 76 | 70 | 1.11 1.11 | 3.0 | | 60 | | |
| 16 | 4 | 75 | 539.27 | 0.79 | 86 76 | 70 | 1.22 1.22 | 3.0 | | 60 | | |
| 17 | 5 | 80 | 542.38 | 0.81 | 86 76 | 71 | 1.25 1.25 | 3.0 | | 60 | | |
| 18 | 6 | 85 | 545.52 | 0.84 | 85 76 | 71 | 1.29 1.29 | 3.5 | | 59 | | |
| 19 | 7 | 90 | 548.71 | 0.80 | 86 76 | 71 | 1.23 1.23 | 3.0 | | 59 | | |
| 20 | 8 | 95 | 551.84 | 0.78 | 86 76 | 71 | 1.20 1.20 | 3.0 | | 59 | | |
| 21 | 9 | 100 | 554.92 | 0.74 | 87 77 | 70 | 1.14 1.14 | 3.0 | | 59 | | |
| 22 | 10 | 105 | 557.94 | 0.70 | 87 77 | 70 | 1.08 1.08 | 2.5 | | 58 | | |
| 23 | 11 | 110 | 560.86 | 0.65 | 86 76 | 70 | 1.00 1.00 | 2.5 | | 58 | | |
| 24 | 12 | 115 | 563.66 | 0.60 | 86 76 | 69 | 0.93 0.93 | 2.5 | | 57 | | ✓ |
| 25 | END | 120 | 566.366 | | | | | | | | | |

FINAL

* FILTER EXIT for NJ Method 1. FILTER BOX for all others.

** PROBE EXIT & / (probe & filter heat off) apply to NJ Method 1. COND. EXIT applies if sampling train has a condenser.

120 70.629 0.7081 79.8 70.6 1.0921
 Min. (B) Vm (ΔP)² cm ts ΔH

%I = 100.6%

CLIENT _____ PLANT BALES MOLD SERVICE RUN NO. S2-306-03
 CITY/STATE DOWNEY'S GROVE JOB NO. 99-028-311 DATE 8/19/99
 SAMPLING LOC. Unit 2 - Scrubber TIME START 1150
 BAROMETRIC PRESSURE, IN. HG 29.87 STATIC PRESSURE, IN. H₂O 0.39 TIME FINISH 1352
 LEAK 1, VACUUM IN. HG 10" 5" TEST PERSONNEL Rue
 LEAK RATE, CFM 0.002 0.003 POSTTEST POS PRESS LEAK ✓ OK? •

• CONDUCT POSTTEST POSITIVE PRESSURE LEAK CHECK FOLLOWING THE LAST RUN PER LOCATION. FOR OTHER RUNS, ENTER "N/A".

| EQUIPMENT CHECKS | | EQUIPMENT I.D. NUMBERS | | LEAK CHECKS | |
|------------------------|--------------------|-----------------------------------|-------------------|----------------------------|-----------------------|
| ✓ PITOT, PRETEST | REAGENT BOX | METER BOX <u>21-23</u> | Y <u>1.0055</u> | B | B |
| ✓ PITOT, POSTTEST | PITOT <u>M-2-7</u> | Cp <u>0.84</u> NOZ'L <u>N-197</u> | DIA. <u>0.197</u> | E | E |
| ✓ NOZZLE, PRE/POST | TC READOUT | TC PROBE | UMBILICAL | B | B |
| ✓ TC <u>76</u> °F PRE | SAMPL'G BOX | ORSAT PUMP | TEDLAR BAG | E | E |
| ✓ TC <u>72</u> °F POST | NOMOGRAPH DATA | | | B | B |
| OR ORSAT SYSTEM | | | | E | E |
| FILTER/XAD | TARE WT. | DELTA-HG <u>1.7325</u> | | B | B |
| | | METER TEMP. <u>80</u> | | E | E |
| | | EST. XH ₂ O <u>2</u> | | | |
| | | "C" FACTOR <u>0.997</u> | | Fyrites, % | YGB |
| | | STACK TEMP. <u>70</u> | | <u>02</u> <u>20.9</u> | <u>0.999</u> |
| | | REF DELTA-P <u>1.180</u> | | CO ₂ <u>0.0</u> | % OF CAL'D Y? (Y) (N) |
| | | "K" FACTOR <u>1.560</u> | | | |

FLWS DROPPED AGAIN! Run Run!

| LINE | SAMPLE POINT | CLOCK TIME, MINUTES | DRY GAS METER READING, CUBIC FEET | PITOT READING, IN. H ₂ O | GAS METER TEMP., °F | | STACK TEMP., °F | ORIFICE SETTING, IN. H ₂ O | | GAUGE VACUUM, IN. HG | GAS TEMPERATURES, °F | | | ✓ |
|------|--------------|---------------------|-----------------------------------|-------------------------------------|---------------------|-----|-----------------|---------------------------------------|-------|----------------------|----------------------|--------------|-----------------------|---|
| | | | | | IN | OUT | | ACTUAL | IDEAL | | FILTER * | IMPING. EXIT | PROBE OR COND. EXIT** | |
| 1 | A-1 | 0 | 566.987 | 0.59 | 78 | 70 | 69 | 0.9 | 0.9 | 2.5 | N/A | 54 | N/A | ✓ |
| 2 | 2 | 5 | 569.64 | 0.61 | 84 | 76 | 69 | 0.94 | 0.94 | 3.0 | | 54 | | |
| 3 | 3 | 10 | 572.38 | 0.64 | 86 | 76 | 70 | 0.99 | 0.99 | 3.0 | | 55 | | |
| 4 | 4 | 15 | 575.18 | 0.66 | 85 | 75 | 70 | 1.02 | 1.02 | 3.0 | | 56 | | |
| 5 | 5 | 20 | 578.01 | 0.69 | 86 | 76 | 70 | 1.07 | 1.07 | 3.0 | | 56 | | |
| 6 | 6 | 25 | 580.92 | 0.74 | 86 | 76 | 71 | 1.14 | 1.14 | 3.0 | | 57 | | |
| 7 | 7 | 30 | 583.94 | 0.72 | 86 | 76 | 71 | 1.11 | 1.11 | 3.0 | | 57 | | |
| 8 | 8 | 35 | 586.92 | 0.70 | 87 | 77 | 71 | 1.08 | 1.08 | 3.0 | | 58 | | |
| 9 | 9 | 40 | 589.89 | 0.68 | 87 | 77 | 71 | 1.05 | 1.05 | 3.0 | | 58 | | |
| 10 | 10 | 45 | 592.78 | 0.66 | 87 | 77 | 72 | 1.02 | 1.02 | 3.0 | | 58 | | |
| 11 | 11 | 50 | 595.62 | 0.63 | 88 | 78 | 72 | 0.97 | 0.97 | 2.5 | | 59 | | |
| 12 | 12 | 55 | 598.45 | 0.60 | 88 | 78 | 72 | 0.93 | 0.93 | 2.5 | | 59 | | |
| 13 | B-1 | 60 | 601.154 | 0.65 | 88 | 79 | 71 | 1.01 | 1.01 | 3.0 | | 60 | | |
| 14 | 2 | 65 | 604.03 | 0.69 | 90 | 80 | 71 | 1.07 | 1.07 | 3.0 | | 60 | | |
| 15 | 3 | 70 | 606.94 | 0.72 | 90 | 80 | 71 | 1.12 | 1.12 | 3.0 | | 59 | | |
| 16 | 4 | 75 | 609.92 | 0.76 | 90 | 80 | 71 | 1.18 | 1.18 | 3.0 | | 58 | | |
| 17 | 5 | 80 | 612.96 | 0.79 | 89 | 79 | 70 | 1.23 | 1.23 | 3.5 | | 57 | | |
| 18 | 6 | 85 | 616.07 | 0.80 | 89 | 79 | 70 | 1.24 | 1.24 | 3.5 | | 57 | | |
| 19 | 7 | 90 | 619.23 | 0.81 | 89 | 81 | 71 | 1.26 | 1.26 | 3.0 | | 58 | | |
| 20 | 8 | 95 | 622.42 | 0.76 | 90 | 80 | 71 | 1.18 | 1.18 | 3.0 | | 58 | | |
| 21 | 9 | 100 | 625.48 | 0.70 | 89 | 80 | 71 | 1.09 | 1.09 | 3.0 | | 59 | | |
| 22 | 10 | 105 | 628.41 | 0.68 | 89 | 80 | 71 | 1.05 | 1.05 | 3.0 | | 59 | | |
| 23 | 11 | 110 | 631.31 | 0.64 | 89 | 81 | 71 | 0.99 | 0.99 | 3.0 | | 60 | | |
| 24 | 12 | 115 | 634.14 | 0.58 | 89 | 81 | 71 | 0.90 | 0.90 | 3.0 | | 60 | | |
| 25 | END | 120 | 636.849 | | | | | | | | | | | ✓ |

FINAL

* FILTER EXIT for NJ Method 1. FILTER BOX for all others.

** PROBE EXIT & / (probe & filter heat off) apply to NJ Method 1. COND. EXIT applies if sampling train has a condenser.

120 69.862 0.6860 82.7 70.8 1.0642
 Min. (θ) Vm (ΔP)² cm ss ΔH

%I = 100.7

MOISTURE ANALYTICAL RESULTS

--Client

Plant Name BATES Mold Service

Job No. 99-028-50

City/State Downers Grove, IL

Sampling Loc. Scribner (cup) #2

Run Number

52-306-01

S2-306-02

S2-304-03

Sampling Date

8/19/99

8/19/99

8/19/99

Analysis Data

64

1

4

Analyst

Re

Rue

Re

| | | | |
|--------------------------------|------------|------------|------------|
| Reagent 1 (<u>0.1N NaOH</u>) | | | |
| Final Weight, g | <u>220</u> | <u>218</u> | <u>222</u> |
| Tared Weight, g | <u>200</u> | <u>200</u> | <u>200</u> |
| Water Catch, g | <u>20</u> | <u>18</u> | <u>22</u> |
| Reagent 2 (_____) | | | |
| Final Weight, g | _____ | _____ | _____ |
| Tared Weight, g | _____ | _____ | _____ |
| Water Catch, g | _____ | _____ | _____ |
| Reagent 3 (_____) | | | |
| Final Weight, g | _____ | _____ | _____ |
| Tared Weight, g | _____ | _____ | _____ |
| Water Catch, g | _____ | _____ | _____ |
| CONDENSED WATER, g | <u>20</u> | <u>18</u> | <u>22</u> |

| | | | |
|-------------------|----------------------------------|--------------|--------------|
| <u>Silica Gel</u> | | | |
| Final Weight, g | <u>163.8</u> 166.0 | <u>166.0</u> | <u>163.5</u> |
| Tared Weight, g | <u>148.1</u> | <u>150.7</u> | <u>150.4</u> |
| ADSORBED WATER, g | <u>15.7</u> | <u>15.3</u> | <u>13.1</u> |

| | | | |
|--------------------------|-------------|-------------|-------------|
| TOTAL WATER COLLECTED, g | <u>35.7</u> | <u>33.3</u> | <u>35.1</u> |
|--------------------------|-------------|-------------|-------------|

Balance No. *RW-01G*

Type ☒ Triple Beam

Electronic

Reagent Box No.

Balance located in stable, draft-free area (✓)? Yes ☒ No ☐ (If "No", explain below.)

Comments

Plant Name BATES Model Job No. 99-028-311
City/State Downer Grove, IL Date 17 AUG 99
Test Loc. Scribner #2 (Chrome) Personnel RC/CM
Barometric Pres. (Pbar) 29.98 In. Hg Static Pres. (Pg) +0.79 In. H₂O
Pitot/Orifice ID M-2-7 Pitot Coef. (Cp) 0.84 Pres. Gauge Set ID 23-71
Thermocouple ID _____ Duct Length/Diameter 17" Width _____
Horizontal Duct Flyash/Dust Buildup > 1" Depth (J)? Yes ☐ No ☒ (If Yes, see Page 2 for Instructions.)

| PRELIMINARY TRAVERSES | | | |
|---------------------------|------------|----------------------|----------|
| Start - Finish Times: | | | |
| <u>1330</u> - <u>1400</u> | | | |
| Test Pt. | Yaw Ang. ° | ΔP "H ₂ O | Temp. °F |
| A-1 | +8 | 0.70 | 81 |
| 2 | +6 | 0.75 | 81 |
| 3 | +4 | 0.89 | 82 |
| 4 | +10 | 0.97 | 82 |
| 5 | +12 | 0.98 | 82 |
| 6 | +4 | 1.05 | 81 |
| 7 | +4 | 1.05 | 81 |
| 8 | +7 | 0.94 | 82 |
| 9 | +6 | 0.93 | 83 |
| 10 | +4 | 0.81 | 83 |
| 11 | +1 | 0.70 | 82 |
| 12 | +2 | 0.68 | 82 |
| B-1 | +3 | 0.60 | 82 |
| 2 | +1 | 0.71 | 82 |
| 3 | -2 | 0.74 | 82 |
| 4 | -3 | 0.78 | 82 |
| 5 | +4 | 0.81 | 83 |
| 6 | -3 | 0.81 | 83 |
| 7 | +5 | 0.92 | 83 |
| 8 | +4 | 0.91 | 83 |
| 9 | +8 | 0.85 | 83 |
| 10 | +7 | 0.79 | 83 |
| 11 | +5 | 0.70 | 82 |
| 12 | +7 | 0.71 | 82 |
| | | | |
| Avg. | 5.0 | 0.82 | 82 |

[illegible]

Note: Yaw angle average is sum of the absolute values divided by number of measurements, and must be $< 20^\circ$.

ΔP average is square of average square root.

* From isokinetic sampling field data sheet.

**** Minutes/Point = cos ϕ (Base Time).**

$$*** \text{ Average } \Delta P_{\gamma} = \{ (\Sigma \cos \phi \sqrt{\Delta P}) / n \}^2$$

PAT LAYMAN

VOLUMETRIC FLOW RATE DETERMINATION

Company & Plant: Bales Mold Service
Date: 08-17-99
Run: Prelim -01
Time: 1330 - 1400
Personnel: RMC/CMC
Measurement Location: Unit 2 Stack

TEST DATA

| Test Point | Delta P (in H2O) | Temp. (Deg F) | Test Point | Delta P (in H2O) | Temp. (Deg F) |
|------------|------------------|---------------|-------------------------------|------------------|-------------------|
| A-1 | 0.70 | 81 | 9 | 0.85 | 83 |
| 2 | 0.75 | 81 | 10 | 0.79 | 83 |
| 3 | 0.89 | 82 | 11 | 0.7 | 82 |
| 4 | 0.97 | 82 | 12 | 0.71 | 82 |
| 5 | 0.98 | 82 | | | |
| 6 | 1.05 | 81 | Duct Area (A): | | 254.47 |
| 7 | 1.05 | 81 | Barometric Pressure (Pbar): | | 29.98 inches Hg |
| 8 | 0.94 | 82 | Static Pressure (Pg): | | 0.79 inches H2O |
| 9 | 0.93 | 83 | Pitot Tube Coefficient (Cp): | | 0.84 |
| 10 | 0.81 | 83 | Percent O2 (%O2): | | 20.90 % O2 |
| 11 | 0.70 | 82 | Percent CO2 (%CO2): | | 0.00 % CO2 |
| 12 | 0.68 | 82 | Percent Nitrogen (%N2): | | 79.10 % N2 |
| B-1 | 0.60 | 82 | Meter Box Factor (Y): | | 1.0055 |
| 2 | 0.71 | 82 | Average Meter Temp. (Tm): | | 95.0 Degrees F |
| 3 | 0.74 | 82 | Gas Meter Volume (Vm): | | 19.250 Cubic Feet |
| 4 | 0.78 | 82 | Tot. Moisture Catch (Wm): | | 11.0 grams |
| 5 | 0.81 | 82 | Delta H (dH): | | 1.00 |
| 6 | 0.81 | 83 | | | |
| 7 | 0.92 | 83 | Root Mean Sq. Delta P (Pavg): | | 0.82 inches H2O |
| 8 | 0.91 | 83 | Mean Temperature (Ts): | | 82 Degrees F |

CALCULATIONS

| | | | | |
|-------------------------------------|--|-------------|--------|------------|
| STD GAS METER VOLUME: | $Vm(std) = (Vm)(Y)(17.64)((Pbar + (dh/13.6))/(Tm+460))$ | $Vm(std) =$ | 18.489 | dscf |
| VOLUME OF WATER VAPOR CONDENSED: | $Vw(std) = (4.715E-02)(Wm)$ | $Vw(std) =$ | 0.5 | cubic ft. |
| PERCENT MOISTURE: | $\% H2O = [Vwc(std)/(Vwc(std) + Vm(std))] \times 100$ | $\% H2O =$ | 2.6 | % H2O |
| DRY MOLE FRACTION OF STACK GAS: | $Mfd = 1 - (\%H2O/100)$ | $Mfd =$ | 0.974 | |
| ABSOLUTE STACK GAS PRESSURE: | $Ps = Pbar + (Pg/13.6)$ | $Ps =$ | 30.04 | in. Hg |
| WET MOLECULAR WEIGHT OF STACK GAS: | $Ms = (Md)(Mfd) + 0.18(\%H2O)$ | $Ms =$ | 28.56 | lb/lb-mole |
| DRY MOLECULAR WEIGHT OF STACK GAS: | $Md = 0.44(\%CO2) + 0.32(\%O2) + 0.28(\%N2)$ | $Md =$ | 28.84 | lb/lb-mole |
| AVERAGE STACK GAS VELOCITY: | $Vs = 85.49(Cp) \times \sqrt{((Pavg)(Ts + 460)/(Ps)(Ms))}$ | $Vs =$ | 51.7 | ft/sec |
| DRY VOLUMETRIC STACK GAS FLOW RATE: | $Qsd = 7.353(Mfd)(Vs)(A)(Ps)/(Ts + 460)$ | $Qsd =$ | 5,222 | SCFM |
| WET VOLUMETRIC STACK GAS FLOW RATE: | $Qaw = (60/144)(Vs)(A)$ | $Qaw =$ | 5,482 | ACFM |

MONITORING DATA FORM

Applicable Rule: 40 CFR Part 63, Subpart N--National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

Plant Name/Location: Bales mold service

Air Pollution Control System: PBS/CMC

Control System ID #: _____

Monitoring Data:

(A) 1999

(B) 1999

| Pressure drop across system ^a | | |
|---|---------------|----------|
| Inches of H ₂ O column | Date recorded | Initials |
| 1.8 | 8/19 | BM |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Applicable range established during initial performance test: _____ | | |

| Velocity pressure of system inlet ^b | | |
|---|---------------|----------|
| Inches of H ₂ O column | Date recorded | Initials |
| 1.6 | 8/19 | B.M |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Applicable range established during initial performance test: _____ | | |

^aPressure drop monitoring is required for composite mesh-pad (CMP) systems, packed-bed scrubbers (PBS), combination scrubbers and wet-dry mist eliminators (including the upstream control device used to prevent plugging). A continuous strip recorder may be added to the ΔP monitor to continuously record pressure drop.

^bVelocity pressure monitoring is required for PBS only.

Appendix C - Analytical Data for Total Chromium

TestAmerica

INCORPORATED

Ms. Rachel Chleborowicz
RMC ENVIRONMENTAL
1978 Classic Cir.
Rockford, IL 61108

09/01/1999

NET Job Number: 99.09115

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130
A2LA Cert. No.: 0453-01

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of TestAmerica for analysis.

Project Description: 99-028-311

| Sample Number | Sample Description | Date Taken | Date Received |
|---------------|--------------------|------------|---------------|
| 542196 | S2-306-01 | 08/19/1999 | 08/23/1999 |
| 542197 | S2-306-02 | 08/19/1999 | 08/23/1999 |
| 542198 | S2-306-03 | 08/19/1999 | 08/23/1999 |
| 542199 | S2-306-04 | 08/19/1999 | 08/23/1999 |

Bates Mold.

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow TestAmerica Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. TestAmerica has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:

Mary Pearson

Mary Pearson
Project Manager

ANALYTICAL REPORT

Ms. Rachel Chleborowicz
RMC ENVIRONMENTAL
1978 Classic Cir.
Rockford, IL 61108

09/01/1999

Sample No. : 542196

Job No.: 99.09115

Sample Description: S2-306-01
99-028-311

Date Taken: 08/19/1999
Time Taken: 07:30

Date Received: 08/23/1999
Time Received: 14:30

| Analyte | Result | Flag | Units | Reporting Limit | Date Analyzed | Analyst Initials | Analytical Method |
|---------------|--------|------|-------|--------------------|------------------|---------------------|----------------------|
| Chromium, ICP | <0.040 | | mg/L | 0.040 | 08/30/1999 | jtt | EPA 200.7 |

ANALYTICAL REPORT

Ms. Rachel Chleborowicz
RMC ENVIRONMENTAL
1978 Classic Cir.
Rockford, IL 61108

09/01/1999

Sample No. : 542197

Job No.: 99.09115

Sample Description: S2-306-02
99-028-311

Date Taken: 08/19/1999
Time Taken: 09:50

Date Received: 08/23/1999
Time Received: 14:30

| Analyte | Result | Flag | Units | Reporting Limit | Date Analyzed | Analyst Initials | Analytical Method |
|---------------|--------|------|-------|--------------------|------------------|---------------------|----------------------|
| Chromium, ICP | <0.040 | | mg/L | 0.040 | 08/30/1999 | jtt | EPA 200.7 |

ANALYTICAL REPORT

Ms. Rachel Chleborowicz
RMC ENVIRONMENTAL
1978 Classic Cir.
Rockford, IL 61108

09/01/1999

Sample No. : 542198

Job No.: 99.09115

Sample Description: S2-306-03
99-028-311

Date Taken: 08/19/1999
Time Taken: 12:00

Date Received: 08/23/1999
Time Received: 14:30

| Analyte | Result | Flag | Units | Reporting Limit | Date Analyzed | Analyst Initials | Analytical Method |
|---------------|--------|------|-------|--------------------|------------------|---------------------|----------------------|
| Chromium, ICP | <0.040 | | mg/L | 0.040 | 08/30/1999 | jtc | EPA 200.7 |

ANALYTICAL REPORT

Ms. Rachel Chleborowicz
RMC ENVIRONMENTAL
1978 Classic Cir.
Rockford, IL 61108

09/01/1999

Sample No. : 542199

Job No.: 99.09115

Sample Description: S2-306-04
99-028-311

Date Taken: 08/19/1999
Time Taken: 14:00

Date Received: 08/23/1999
Time Received: 14:30

| Analyte | Result | Flag | Units | Reporting Limit | Date Analyzed | Analyst Initials | Analytical Method |
|---------------|--------|------|-------|--------------------|------------------|---------------------|----------------------|
| Chromium, ICP | <0.040 | | mg/L | 0.040 | 08/30/1999 | jtt | EPA 200.7 |

TestAmerica Bartlett Division
TestAmerica
 KEY TO ABBREVIATIONS AND METHOD REFERENCES
 INCORPORATED

- < : Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
- mg/L : Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
- ug/g : Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
- ug/L : Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
- ug/Kg : Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
- TCLP : These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
- Surr: : These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
- % : Percent; To convert ppm to %, divide the result by 10,000.
 To convert % to ppm, multiply the result by 10,000.
- ICP : Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
- AA : Indicates analysis was performed using Atomic Absorption Spectroscopy.
- GFAA : Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
- PQL : Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

- (1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.
- (2) ASTM "American Society for Testing Materials"
- (3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.
- (4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.
- (5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.
- (6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.
- (7) See "Methods for the Determination of Metals in Environmental Samples", Supplement I EPA-600/R-94/111, May 1994.
- (8) See "Standard Methods for the Examination of Water and Wastewater", 18th Ed., APHA, 1992.
- (9) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986, Including Updates I and II.
- (10) This method is from the 2nd Edition of "Test Methods for Evaluating Solid Waste", USEPA SW-846. It has been dropped from the 3rd Edition, 1986.

**Appendix D - Reference Measurement Calibration,
Chain of Custody and QA/QC Documentation**

- | | | | | |
|-------------------------------------|--------------------------------------|----------------------------------|---------------------------------------|---|
| Relinquished By: <i>[Signature]</i> | Date <i>8/20/99</i> Time <i>1340</i> | Received By: <i>Paul E. Stow</i> | Date <i>8-20-99</i> Time <i>13:40</i> | LAB USE ONLY: Custody Seal: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Bottles Supplied by TA: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Relinquished By: <i>Alberry</i> | Date <i>8/23/99</i> Time <i>1430</i> | Received By: <i>P. Merrill</i> | Date <i>8/23/99</i> Time <i>1430</i> | |
| Relinquished By: | Date Time | Received By: | Date Time | |
| Relinquished By: | Date Time | Received By: | Date Time | |

Meter Box Full T₀ Calibration

DATE: 3/26/99

Operator: S.T.

| Meter Box No: 71-23 | | | | Meter Box $\Delta H@$: 1.7325 | | | | | | Meter Box Y_d : 1.0055 | | | | Barometric Pressure: 29.61 | | | | |
|---------------------|------------|------------|----------|--------------------------------|--------|----------|---|---------|--------|-----------------------------|--------|----------|----------------------------|----------------------------|-------|-------|--------|--------|
| | | | | Standard Meter Gas Volume | | | Meter Box Gas Volume (ft ³) | | | Std. Meter Temperature (°F) | | | Meter Box Temperature (°F) | | | | | |
| Q | ΔH | ΔP | Y_{ds} | Initial | Final | V_{ds} | Initial | Final | V_d | Inlet | Outlet | T_{ds} | Inlet | T_o | T_d | Time | Y_d | $H@$ |
| 0.969 | 3.00 | -1.70 | 1.0000 | 0.0 | 10.000 | 10.000 | 039.520 | 049.712 | 10.192 | 64.0 | 64.0 | 64.0 | 89.0 | 77.5 | 83.3 | 10.29 | 1.0054 | 1.7482 |
| 0.970 | 3.00 | -1.70 | 1.0000 | 0.0 | 10.000 | 10.000 | 049.712 | 059.927 | 10.215 | 64.0 | 64.0 | 64.0 | 89.0 | 79.0 | 84.0 | 10.28 | 1.0045 | 1.7399 |
| 0.394 | 0.50 | -0.80 | 1.0000 | 0.0 | 5.000 | 5.000 | 068.663 | 073.785 | 5.122 | 64.0 | 64.0 | 64.0 | 84.0 | 80.0 | 82.0 | 12.65 | 1.0065 | 1.7532 |
| 0.394 | 0.50 | -0.80 | 1.0000 | 0.0 | 5.000 | 5.000 | 073.785 | 078.912 | 5.127 | 64.0 | 64.0 | 64.0 | 84.0 | 80.0 | 82.0 | 12.66 | 1.0055 | 1.7560 |
| 0.692 | 1.50 | -1.40 | 1.0000 | 0.0 | 10.000 | 10.000 | 087.910 | 098.173 | 10.263 | 64.0 | 64.0 | 64.0 | 88.5 | 81.0 | 84.8 | 14.40 | 1.0057 | 1.7007 |
| 0.693 | 1.50 | -1.40 | 1.0000 | 0.0 | 10.000 | 10.000 | 098.173 | 108.450 | 10.277 | 64.0 | 64.0 | 64.0 | 89.0 | 81.5 | 85.3 | 14.39 | 1.0052 | 1.6968 |
| AVERAGE | | | | | | | | | | | | | | | | | 1.0055 | 1.7325 |

Nomenclature

| | |
|------------|--|
| P_b | Barometric Pressure (in. Hg) |
| Q | Flow Rate (cfm) |
| ΔH | Orifice Pressure Differential (in. H ₂ O) |
| ΔP | Inlet Pressure Differential (in. H ₂ O) |
| V_d | Gas Meter Volume - Dry (ft ³) |
| V_{ds} | Standard Meter Volume - Dry (ft ³) |
| T_d | Average Meter Box Temperature (°F) |
| T_o | Outlet Meter Box Temperature (°F) |
| T_{ds} | Average Standard Meter Temperature (°F) |
| C_d | Meter Correction Factor (unitless) |
| C_{ds} | Standard Meter Correction Factor (unitless) |
| $H@$ | Orifice Pressure Differential giving 0.75 cfm of air at 68°F and 29.92 in. Hg (in. H ₂ O) |

Vacuum Gauge

| Standard (in. Hg) | Vacuum Gauge |
|-------------------|--------------|
| 5.1 | 5.0 |
| 10.2 | 10.0 |
| 15.3 | 15.0 |
| 20.2 | 20.0 |
| 25.0 | 25.0 |
| | |
| | |
| | |

Thermometers

| Standard (°F) | Inlet | Outlet |
|---------------|-------|--------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Equations

$$Y_d = (Y_{ds}) \left[\frac{V_{ds}}{V_d} \right] \left[\frac{T_d + 460}{T_{ds} + 460} \right] \left[\frac{P_b + \Delta P / 13.6}{P_b + \Delta H / 13.6} \right]$$

$$\Delta H@ = \frac{0.0319(\Delta H)}{P_b(T_o + 460)} \left[\frac{(T_{ds} + 460) \Theta}{(V_{ds})(Y_{ds})} \right]^2$$

$$Q = \frac{17.64 (V_{ds}) (P_b)}{(T_{ds} + 460) (\Theta)}$$



Pyrometer Calibration Test Report

| | | | |
|----------------|----------------|-------------|-------------------------|
| Pyrometer No.: | <u>71-23</u> | Office: | <u>Palatine, IL</u> |
| Calibrated By: | <u>S.T.</u> | Client: | <u>EN-Chiro Plating</u> |
| Date: | <u>3/26/99</u> | Job Number: | <u>99- - 311</u> |

| Calibration Reference Settings for Fahrenheit Scale | Pyrometer Reading |
|--|-------------------|
| 50 °F | 50 °F |
| 100 °F | 100 °F |
| 150 °F | 151 °F |
| 200 °F | 201 °F |
| 250 °F | 251 °F |
| 300 °F | 301 °F |
| 350 °F | 351 °F |
| 400 °F | 401 °F |
| 450 °F | 451 °F |
| 500 °F | 501 °F |
| 550 °F | 551 °F |
| 600 °F | 601 °F |

Calibration Reference Information

| | | | |
|-----------------|---------------------------|------------|----------------|
| Reference Used: | <u>Omega CI-23</u> | Serial No: | <u>T-87859</u> |
| Calibrated By: | <u>J.H. Metrology Co.</u> | Date: | <u>6/8/98</u> |
| Report No: | <u>R022976</u> | | |

TYPE S PITOT TUBE INSPECTION DATA

Date March 13, 1998

Pitot Number: m-4-1
4-26-93-1

Pitot tube assembly level? yes x no

Pitot tube opening damage? yes no x
If yes explain below.

$\alpha_l =$ 1 ($<10^\circ$)

$\alpha^{TM} =$ 2 ($<10^\circ$)

$\beta_l =$ 1 ($<5^\circ$)

$\beta^{TM} =$ 1 ($<5^\circ$)

$\gamma =$ 0 $^\circ$

$\theta =$ 0 $^\circ$

$A =$ 0.744 cm (in)

$Z = A \text{ SINE } \gamma =$ 0.000 cm (in)

Where Z is <0.32 cm ($<1/8$ in)

$W = A \text{ SINE } \theta =$ 0.000 cm (in)

Where W is <0.08 cm ($<1/32$ in)

$P_A =$ 0.372 cm, in

$P_b =$ 0.372 cm, in

$P = P_A + P_b / 2 =$ 0.372 cm, in

Dt (tube diameter) = 0.25 cm, in

$P / Dt =$ 1.488 Where $P / Dt \geq 1.05$ and ≤ 1.50

Comments: 4' m-5 probe Dept. 71\

$cp =$ 0.84

Calibration Required? yes no x

Calibrated By: L. Rouse

TYPE S PITOT TUBE INSPECTION DATA

Date February 8, 1999 Pitot Number m-2-7

Serial Number 10-31-95-1

Pitot Tube Assembly level Y (Yes or No)

Pitot Tube Opening Damaged N (If yes Explain)

$\alpha 1 = \underline{2}$ (<10), $\alpha 2 = \underline{2}$ (<10) $\beta 1 = \underline{0}$ (<5) $\beta 2 = \underline{2}$ (<5)

$Y = \underline{0}$ deg. $\theta = \underline{0}$ deg $A = \underline{0.725}$ in

$Z = A \sin Y = \underline{0.000}$ in.; $< 1/8$ in Where Z is <0.32 cm ($<1/8$ in)

$W = A \sin \theta = \underline{0.000}$ in.; $< 1/32$ in. Where W is <0.08 cm ($<1/32$ in)

$P_a \underline{0.363}$ in $P_b \underline{0.362}$ in

$P = (P_a + P_b)/2 = \underline{0.363}$ in.

Dt (Tube Diameter) = $\underline{0.25}$ in.

$P/Dt = \underline{1.450}$ (> 1.05 and < 1.50)

Comments : 2 ft effective length Method 5 probe Dept 71
 $cp = 0.84$

WIND TUNNEL CALIBRATION REQUIRED? NO (YES or NO)

Calibration by: *L. Amos*

Meter Box Post Test Calibrations

Date: 9/30/99

Operator: C McDermid

Project Number: 99-028 & 033-311

Client: Bales & Prince

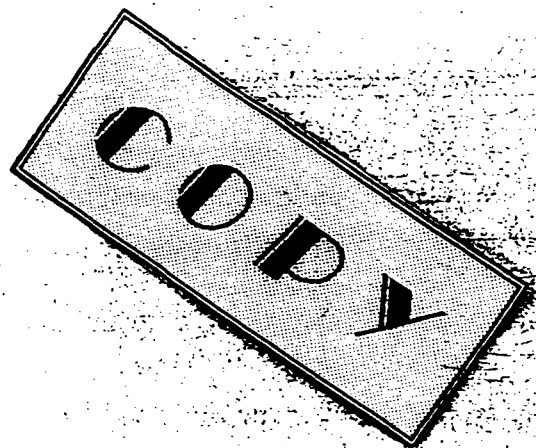
| | | | | | | | | | | | | | | | | | | |
|--------------------|-----|------|-------|-----------------------|-------|-------|---------------------------------|--------|-------|----------------------|--------|------|---------------------------|------|------|------|--------|--------|
| Meterbox No: 71-23 | | | | Meter Box Vacuum: 2.0 | | | | | | Meter Box Yd: 1.0055 | | | Barometric Pressure 29.5 | | | | | |
| | | | | Std Meter Gas Volume | | | Meter Box Gas Volume (Cubic Ft) | | | Std Meter Temp (F) | | | Meter Box Temperature (F) | | | | | |
| Q | DH | DP | Yds | Initial | Final | Vds | Initial | Final | Vd | Inlet | Outlet | Tds | In | Out | Td | Time | Yd | H@ |
| 0.73 | 1.8 | -2.3 | 1.000 | 0.0 | 3.877 | 3.877 | 407 | 410.58 | 3.580 | 69.0 | 69.0 | 69.0 | 74.5 | 76.2 | 75.4 | 5.20 | 1.0853 | 1.6244 |
| 0.7 | 1.8 | -2.3 | 1.000 | 0.0 | 3.700 | 3.700 | 410.58 | 414.16 | 3.580 | 69.0 | 69.0 | 69.0 | 80.2 | 81.9 | 81.1 | 5.21 | 1.0468 | 1.7715 |
| 0.62 | 1.8 | -2.3 | 1.000 | 0.0 | 3.252 | 3.252 | 414.16 | 417.75 | 3.590 | 69.0 | 69.0 | 69.0 | 83.8 | 86.3 | 85.1 | 5.20 | 0.9243 | 2.2661 |
| AVERAGE | | | | | | | | | | | | | | | | | 1.0188 | |
| % Deviation | | | | | | | | | | | | | | | | | -1.325 | |

| NOMENCLATURE | |
|--------------|--|
| Pb | Barometric Pressure |
| Q | Flow Rate (cfm) |
| DH | Orifice Pressure Differential (in HG) |
| DP | Inlet Pressure Differential (in H2O) |
| Vd | Gas Meter Volume - Dry (cubic Ft) |
| Vds | Standard Meter Volume - Dry (cubic Ft) |
| Td | Average Meter Box Temp (F) |
| To | Outlet Meter Box Temp (F) |
| Tds | Average Standard Meter Temp (F) |
| Yd | Meter Correction Factor (unitless) |
| Yds | Standard Meter Correction Factor (unitless) |
| H@ | Orifice Pressure Differential giving 0.75 cfm of air at 68 Deg F and 29.92 in HG |

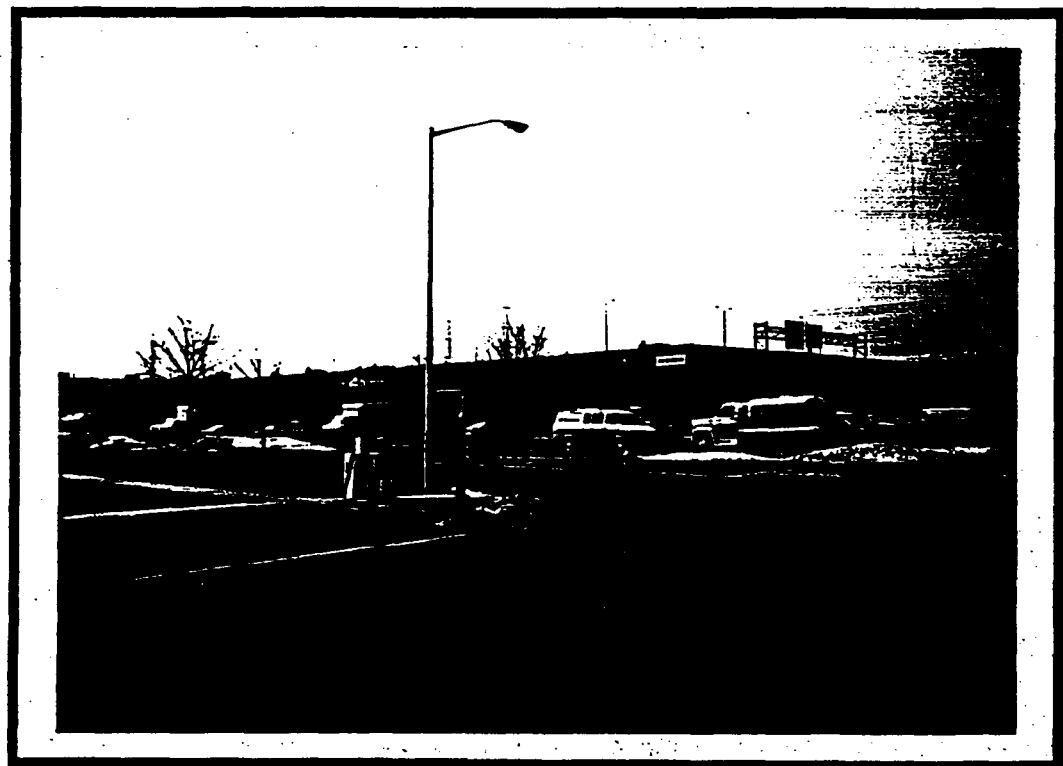
| Equations |
|-----------|
| |

Sales

EDI
ENVIRONMENTAL
DISCOVERY INC.



PHASE I ENVIRONMENTAL ASSESSMENT



**5100-08 THATCHER ROAD
DOWNERS GROVE, ILLINOIS**

2001
F

*Environmental Consulting &
Due Diligence Investigations*

Exhibit J

PHASE I ENVIRONMENTAL ASSESSMENT
of
5100-08 THATCHER ROAD
DOWNERS GROVE, ILLINOIS
for
FIRST CHICAGO BANK/DOWNERS GROVE

ENVIRONMENTAL DISCOVERY, INC.
105 W. Jackson St., Naperville, IL 60540
March 24, 1994 Job # 940508
708/416-9410

EDI
ENVIRONMENTAL
DISCOVERY, INC.

PHASE I ENVIRONMENTAL ASSESSMENT

Table of Contents

Page

EXECUTIVE SUMMARY

Findings
Recommendations

ASSESSMENT REPORT

| | | |
|-------------|---|----|
| I. | Introduction | |
| | Scope of Services | 1 |
| | Limitations | 3 |
| II. | Property Description | |
| | Location | 4 |
| | Facility Detail | 5 |
| | Asbestos Survey | 9 |
| | Radon Survey | 9 |
| III. | Site Reconnaissance | 10 |
| | Property Photographs | |
| IV. | Environmental Assessment Questionnaire | |
| V. | Environmental Records Review | 12 |
| | Databases | |
| | Hazardous Waste Activity/Storage Sites (HWAS) | |
| | Orphan List of Hazardous Waste Activity/Storage Sites | |
| | Aboveground/Underground Storage Tank Sites (UST) | |
| | Orphan List of Underground Storage Tank Sites | |
| | Leaking Underground Storage Tank Sites (LUST) | |
| | Orphan List of Leaking Underground Storage Tank Sites | |
| | Historical Solid Waste Disposal Sites (HISWD) | |
| | Site Activity Maps | |

PHASE I ENVIRONMENTAL ASSESSMENT

Table of Contents

| | <i>Page</i> |
|---|-------------|
| VI. Prior Use Investigation | |
| Interview | 16 |
| Sanborn Fire Insurance Map Review | 16 |
| Historical Aerial Photographs | 17 |
| Aerial Photographs, immediately following | |
| Property Tax Records | 18 |
| Building Department Records | 19 |
| VII. Surface Mapping | |
| Topography | 20 |
| VIII. Geology/Hydrogeology | |
| Potential for Contamination of Shallow Aquifers | 21 |
| Land Burial of Wastes | 21 |
| Surface Spreading of Wastes | 23 |
| Soil Survey | 24 |
| Site Hydrology/Hydrogeology | 26 |

ADDENDUM

Countywide Radon Screening
PCB Containing Electrical Equipment
Asbestos Containing Materials

PHASE I ENVIRONMENTAL ASSESSMENT

EXECUTIVE SUMMARY

FINDINGS

Operations

Facility Identification:

Identified as 5100-08 Thatcher Road, Downers Grove, Illinois the one-story, multi-tenant office/warehouse building is occupied by the following:

| <u>Name</u> | <u>Address</u> | <u>Type of Business</u> |
|--------------------------|--------------------|--|
| Cablevision | 5100 Thatcher Road | Cable television service, installation and repair |
| Cannon Turf Supply, Inc. | 5104 Thatcher Road | Fertilizer storage and sales |
| Global Gear | 5108 Thatcher Road | Equipment storage |

A building site plan is included within Section II. of the project report. Site photographs are included within Section III. of the project report.

Compliance Issues:

No state or municipal environmental permits are required to conduct the above operations. No manufacturing, assembly, processing or coating operations are conducted on site.

Cannon Turf Supply, Inc. is exempt from the registration and reporting requirements of the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA") as amended, 1988. FIFRA regulates the manufacture, registration, use, storage and disposal of identified poisons in an agricultural setting. While enforcement of FIFRA is focused on manufacturers as a practical matter, FIFRA chemical users are required by the USEPA to be registered and trained in handling, storage and disposal procedures. Cannon Turf Supply, Inc. does not manufacture, process or otherwise use any fertilizer products on site.

Prior Use Investigation

According to Robert L. Green, owner and operator of Global Gear, 5108 Thatcher Road, the vacant and unimproved site was purchased in 1980 with building construction completed the same year. The site is not believed to have been previously developed.

According to tax records maintained by the Lisle Township Assessor's Office, the building was permitted for construction on June 20, 1979. The property was re-assessed as commercially improved on July 27, 1979. Prior property use was vacant and unimproved. The taxpayer of record is Dynagear; prior ownership is not recorded. Building detail documents steel and frame construction on a poured concrete foundation. Property record card copies are included within Section VI. of the project report.

The Downers Grove Building Department issued permit #55 to Favar Builders, Inc. for construction of a one-story, office/warehouse building at 5100-08 Thatcher Road on June 20, 1979. An occupancy permit was issued to Dynagear (Favar Construction) on December 12, 1979. An electrical permit, building plans and survey are also recorded.

Historical Sanborn Fire Insurance Map coverage for the subject and adjacent properties is not available.

EDI obtains and reviews historical aerial photographs in an effort to confirm the prior uses of the subject and adjoining properties. These photographs, available from the Northeastern Illinois Planning Commission ("NIPC") or private sources, typically date to 1949. A review of historical aerial photographs, dated April 13, 1956 and April 26, 1975 document the prior property use as cropland. No evidence of prolonged excavation or construction activity on specific sites in the immediate area is detailed by the historical photographs. Digitized copies of the historical aerial photographs are included within Section VI. of the project report.

The records search and historical aerial photograph review do not identify the potential for inherited environmental liabilities associated with past ownership/operation of the site.

Surface Conditions - Interior

Petroleum stains and loose oil sorbent were observed in an approximate six-foot diameter area within Unit 5108. According to Penny Green, who accompanied EDI during the site inspection, the release was created by a compressor previously stored in this area. No floor drains were observed in close proximity to the apparent release point. A triple catch basin and sump located within Unit 5100 connect directly to the municipal sewer system.

Material Storage Activity:

No hazardous materials are maintained within the building. Five 55-gallon drums of motor oil are maintained within Unit 5100. According to the tenant, the motor oil was used to service the Cablevision vehicle fleet; all vehicle service is now provided off-site. Random petroleum stains from drums spills were observed on the concrete slab floor. No secondary containment to prevent the migration of leaks or spills was observed. The drums are situated directly on top of the triple catch basin.

Surface Conditions - Exterior

No surface depressions, surface stains attributed to chronic leaks or spills or evidence of distressed vegetation was observed during the site inspection. A drainage conduit runs parallel to the west property line, within a fenced easement owned by the Illinois Tollway Authority. No conduits provide for the capture of sheet stormwater runoff on-site. An asphalt-paved parking area is located north and east of the building, with dual-drive access provided from Thatcher Road. Two stormwater catch basins are located at the base of the exterior loading docks. Two additional storm sewers are located within the paved parking lot. Three sanitary sewer connections are located east of the building. Perimeter landscaping. The topographic low point is located on the west property line, with an approximate 1 % downgrade from east-to-west. Equipment, cable and wood debris generated by Cablevision was observed at the northwest corner of the parking lot.

Material Storage Activity:

No hazardous or petroleum-based materials are maintained in inventory.

Waste Generation and Disposal

Non-hazardous, general solid waste only; no hazardous or special wastes are generated by the tenants.

Waste oil previously generated by Cablevision is considered a non-hazardous, special waste. In Illinois, special waste products destined for recycling are not required to be manifested. The waste generator is not required to be identified by an IEPA or USEPA generator identification number. Disposal contractors frequently employ a "multi-stop" permit, which provides for the combination of similar wastes from various sources. Waste oil is typically recycled and sold as a secondary fuel source. It is likely that waste oil generated by Cablevision was recycled, although the tenant could not provide confirmation. Cablevision is not identified as a waste generator by the USEPA RCRIS database.

Underground Storage Tank Investigation

According to the Illinois Office of the State Fire Marshal's UST database, dated January 1994, no underground storage tanks are registered to the subject address. The local fire department has no record of underground storage tank installation(s) and/or removal(s) at the subject address. No evidence indicating the existence of an underground storage tank was observed during the site inspection.

According to the Illinois Office of the State Fire Marshal's UST database, dated January 1994, no underground storage tanks are registered to the adjoining properties. No vent/fill pipe connections were observed on these sites. Identification of registered underground storage tanks appearing within a one-half mile radius of the subject property is included within Section V. of the project report.

Leaking Underground Storage Tank Investigation

According to the list of Leaking Underground Storage Tank ("LUST") sites, dated January 1994, as prepared by the Illinois Environmental Protection Agency ("IEPA"), three LUST sites are located within a one-half mile radius of the subject property. Upon review of distance, direction, geological and hydrogeological considerations, the LUST locations are not perceived to present an environmental threat to the subject site (ASTM Standard E 1527, Phase I Environmental Site Assessment Process, Section 8.4.1.6). Identification of reported LUST sites appearing within a one-half mile radius of the subject property is included within Section V. of the project report.

Aboveground Storage Tank Investigation

No petroleum or regulated substance AST's were observed on the property.

Asbestos Survey

EDI performed a limited, non-AHERA review of the structure. The review was designed to identify reasonably accessible material commonly suspected of containing asbestos. This review is limited by adherence to a non-destructive sampling technique. It is beyond the scope of a Phase I Assessment to prepare a detailed survey of the extent, location and condition of ACM usage.

Approximately 4,248 square feet of 12"x 12" vinyl floor tile, both exposed and apparently under carpet, was observed in the building. Given the age of the building, the floor tile and adhesive mastic are suspected of containing asbestos-form fibers. The tile appeared to be in good condition; the mastic was not exposed.

Other suspect building materials observed, or in probable use, include roofing felts and flashing felts. These materials are not considered highly probable of becoming friable during construction activities. These materials are located on the building exterior and do not pose a health hazard to the building occupants.

Samples of the suspect materials were not taken at the time of the site inspection. The property owner is not currently required by state or federal law to remove, repair, enclose or encapsulate asbestos containing building materials. The owner is required to prevent the visible emission of asbestos fibers during building renovation or demolition, and to provide

proper notification to local and state agencies. A definition of asbestos containing building material, analysis method(s) employed, and a guide to suggested handling and identification procedures have been provided as an addendum to this report.

Radon Survey

Radon studies conducted by the State of Illinois Department of Nuclear Safety in 1987-1988 indicate that a geometric mean radon concentration of 4.40 pCi/L was found in 166 test sites throughout DuPage County. Because of the site specific nature of radon concentrations, testing of the subject property is the only way to document radon levels. There are presently no regulations requiring testing or mitigation of radon in any type of building not owned or operated by the federal government. See the Countywide Radon Screening Addendum provided with this project report.

Air and Water-borne Lead

There are presently no federal regulations requiring the testing or mitigation of lead in the workplace. (Illinois legislation effective January 1, 1993 requires blood level screening prior to admission to child care facilities. A subsequent inspection of buildings occupied by an individual screening positive may be required by the Department of Children and Family Services.) In 1978, the USEPA banned the production of paints for interior use with a lead content exceeding 600 ppm. The USEPA Office of Drinking Water has established regulations under the Safe Drinking Water Act that mandate a maximum contaminant level for lead in drinking water provided by public water systems. In 1986, amendments to the safe Drinking Water Act banned any further use of materials containing lead in public water supplies, and in residences connected to public water supplies. In 1988, the U.S. Congress banned the use of lead-based solder in plumbing applications within homes and buildings. It is beyond the scope of a Phase I Assessment to provide for investigation of lead-containing materials.

Historical Solid Waste Disposal Sites

The Northeastern Illinois Planning Commission has compiled a list of Historical Solid Waste Disposal Sites ("HISWD") from information provided by various state agencies and private organizations. The nearest HISWD site is identified as Philip Knierim, Downers Grove, Illinois located approximately one-half mile southeast of the subject property. According to the NIPC, no hazardous wastes were disposed of at this location.

Active Solid Waste Disposal Sites

No active solid waste disposal sites are identified within a one mile radius of the subject. According to the USGS Wheaton Quadrangle topographic map, photorevised 1980, a sewage disposal facility or sewage lift station is located less than one-quarter mile northeast of the subject.

Hazardous Waste Storage Activity - Adjacent

No hazardous waste storage activity on adjacent properties was observed during the site inspection. The adjoining facilities are not identified as hazardous waste generators or hazardous waste activity sites by the applicable federal and state databases.

Geology/Hydrogeology

According to land use planning maps provided by the Illinois State Geological Survey, the Illinois State Water Survey and the U.S. Department of Agriculture Soil Conservation Service, the subject property soil composition is considered to be moderately susceptible to contamination from the land burial of wastes, and relatively unsusceptible to contamination from the surface spreading of wastes. Surface water runoff from the subject is accelerated by the paved surface. The shallow bedrock aquifer is located approximately 69 feet below grade; shallow bedrock aquifer direction is likely to be southwesterly, towards the East Branch of the DuPage River.

PCB Containing Electrical Equipment

The USEPA defines numerous categories of PCB-containing and PCB-equipment, including fluorescent and mercury vapor light fixture ballasts manufactured prior to 1979. Numerous fluorescent light fixtures observed in the facility are not likely to contain PCB-containing capacitor units. (Improper disposal of PCB containing light fixture ballasts is considered a primary source of groundwater contamination by the IEPA.) A diagram designed to assist in the identification of PCB-containing fluorescent light fixture ballasts has been provided as an addendum to this report.

Commonwealth Edison provides electrical service to the property location. As standard practice, Commonwealth Edison will neither confirm nor deny the existence of PCB's, in any concentration, in any of their equipment. However, for ease of identification, a blue face plate is placed on those transformers which have been retrofit with a non-PCB containing dielectric fluid during routine maintenance. According to Commonwealth Edison, unidentified transformers are assumed to be either non-PCB containing, or are categorized as PCB-contaminated electrical equipment, a classification which is not subject to the ban, and does not require notification to the property owner and local fire department. Three pad-mounted electrical transformers located within 30 meters of the building and parking

area are not identified as containing a non-PCB dielectric fluid. No unusual surface staining attributed to a release from the transformers was observed. According to the Illinois Groundwater Protection Act of 1987 ("IGPA"), PCB containing electrical transformers are considered a potential source of groundwater contamination.

RECOMMENDATIONS

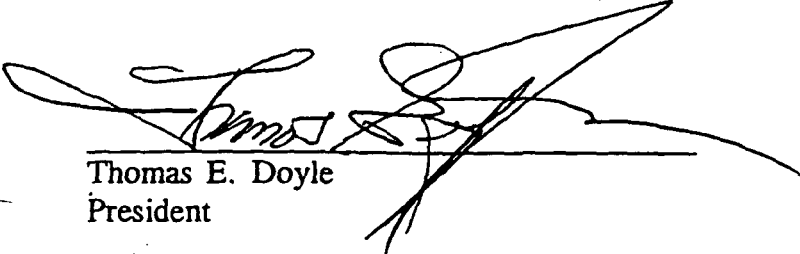
EDI has performed a Phase I assessment of the subject property in conformance with the scope and limitations of ASTM Standard E 1527, Phase I Environmental Site Assessment Process. Any exceptions to, or deletions from, the Standard Practice are described in Section I of this report. The assessment has revealed no evidence of Recognized Environmental Conditions in connection with the property except for the following:

1. If the fluorescent light fixture ballast(s) are determined to contain a PCB capacitor unit, the ballast(s) should be properly handled and disposed of when replacement becomes necessary. Refer to the PCB Containing Electrical Equipment addendum (attached) for information regarding identification of PCB containing light fixture ballasts.
2. Provide for laboratory analysis of suspect asbestos containing building materials identified during the site inspection prior to any planned demolition or renovation of the subject building. Refer to the Asbestos Containing Materials addendum (attached) for clarification of owner requirements and terms definitions.

If demolition or extensive renovation is not planned, all suspect ACM which appears physically damaged, exposed or worn should be analyzed for asbestos content by an accredited laboratory. It is recommended that any damaged or worn asbestos products be removed, repaired, enclosed or encapsulated as soon as is practical to eliminate a potential health hazard. Suspect asbestos flooring products, including adhesive mastic, should not be subjected to grinding, cutting or sanding, as the use of abrasives may result in a low-level fiber release.

3. Removal and proper disposal as a special waste of five 55-gallon waste oil drums from 5100 Thatcher Road, occupied by Cablevision.

Respectfully submitted:
ENVIRONMENTAL DISCOVERY, INC.



Thomas E. Doyle
President

The following is a project report covering a Phase I Environmental Assessment performed by Environmental Discovery, Inc. ("EDI") for First Chicago Bank/Downers Grove ("CLIENT").

This report must be read and interpreted as a whole. Individual sections of this report or its appendix are dependent upon the balance of this report, and upon the terms, conditions and stipulations contained in the proposal, the report and any written amendments thereto accepted by EDI.

I. SCOPE OF SERVICES

Environmental Discovery, Inc. was requested to provide a Phase I Environmental Assessment of the subject property. The request was made to satisfy the investigative requirements of the federal Superfund Amendment and Reauthorization Act of 1986 ("SARA"). SARA provides for an innocent landowner defense vs. EPA enforcement actions if the property owner/operator provides for an "appropriate inspection" of the subject property. EDI's investigation also addresses the generation, storage, transportation and disposal of both special and hazardous wastes and the resultant impact, both realized and contingent, upon the environmental health and the investment value of the site.

The assessment was based on a review of pertinent available records and technical information, interviews with knowledgeable persons and a physical inspection of the property. The following specific tasks were undertaken to complete the assessment:

- * A review of available historical records documenting the prior uses of the property;
- * A review of available construction, technical and management records and documents;
- * Interviews with owners, managers, employees, neighbors and other knowledgeable persons regarding the subject property;
- * Interviews with local, state and federal regulatory officials regarding the environmental status of the property;
- * A visual inspection of the site to determine the existence of apparent environmental concerns;
- * A visual inspection-to the extent possible and reasonable-of the current use of the adjacent properties;

- * Inspection of insulation and building materials for the presence of possible asbestos-containing materials;
- * Facility compliance status with federal, state and local license/permit requirements;
- * A comparison of waste generation, storage and disposal procedures vs. regulatory requirements.

The project report request was not generated by the legal requirements of the Illinois Responsible Property Transfer Act of 1988 ("RPTA"), therefore, EDI has not prepared, nor will file with the appropriate state agencies, the Illinois Environmental Disclosure Document for the Transfer of Real Property.

Limitations

The Phase I Environmental Assessment was completed in accordance with ASTM Standard E 1527, Phase I Environmental Site Assessment Process. Relying principally on historical research, visual observations of the subject and adjacent properties, and a site inspection, the Phase I Assessment does not involve any sampling, testing or laboratory analysis unless specifically detailed below. The project report is designed to identify Recognized Environmental Conditions associated with current and past uses. ASTM Standard E 1527 Section 1.1.1 defines Recognized Environmental Conditions as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The Phase I scope does not include analysis of subsurface soil or groundwater conditions; documentation of hazardous workplace conditions or violations of Occupational Safety and Health Act ("OSHA") standards; or, identification of documented or undocumented wetlands areas. Further, the Phase I Assessment findings and/or recommendations do not guarantee continued or planned property use of any type. EDI cannot be held responsible if the tenant or property owner has willfully withheld information regarding past or continuing operations. EDI cannot be held responsible if the tenant or property owner has willfully concealed or misrepresented any conditions which would be generally perceived as environmental liabilities. The Phase I Assessment does not warranty or guarantee the documentation of the presence or absence of environmental liabilities which may effect the property.

The project report was prepared in accordance with the criteria established by Section 22.2 (j)(6)(E) of the Illinois Environmental Protection Act ("ACT"), with the exception of the inclusion of a 75-year title review. The facts as stated within the project report are true, and are made under penalty of perjury as defined in Section 32-2 of the Criminal Code of 1961.

II. PROPERTY DESCRIPTION

Location

Date of Inspection: March 9, 1994

Property Address: 5100-08 Thatcher Road, Downers Grove, Illinois

Permanent Identification Number (PIN): 08-11-407-039

Size:

Property: 1.189 acres

Building: 21,960 sq. ft.

Surrounding Arteries

North: Thatcher Road

South: Hitchcock Avenue

East: Thatcher Road

West: North/South Tollway (I-355)

Surrounding Properties

Tenant/Address/Use

North: Multi-tenant/2848-54 Hitchcock Street/Commercial

South: Multi-tenant/5120 Thatcher Road/Commercial

East: Neuco, Inc./5101 Thatcher Road/Commercial

West: Illinois Tollway Authority easement (I-355)

Facility Detail

Current Operations:

| <u>Identification</u> | <u>Address</u> | <u>Type of Business</u> |
|-------------------------|--------------------|---|
| Cablevision | 5100 Thatcher Road | Cable television service, installation and repair |
| Canon Turf Supply, Inc. | 5104 Thatcher Road | Fertilizer storage and sales |
| Global Gear | 5108 Thatcher Road | Equipment storage |

Structural Detail

| | |
|------------------------|---------------------|
| <i>Construction:</i> | Masonry |
| <i>Design:</i> | Office/warehouse |
| <i>Stories:</i> | One |
| <i>Basement:</i> | No |
| <i>Foundation:</i> | Poured concrete |
| <i>Exterior walls:</i> | Brick |
| <i>Roof structure:</i> | Steel deck |
| <i>Roof exterior:</i> | Tar & gravel |
| <i>Loading docks:</i> | Two; five O/H doors |
| <i>Elevator:</i> | No |
| <i>Sprinkler:</i> | Yes |

Interior Detail - 5100 Thatcher Road

Flooring: *12"x12" vinyl tile/Carpet on tile/Concrete slab
Ceiling Construction: Cellulose laminate acoustic tile/Exposed steel deck
Wall Construction: Painted sheetrock/Masonry block
Lighting: Fluorescent
Insulation:
Structural: None observed
Plumbing/Boiler: None observed
HVAC: None observed
Heating System: Gas-forced air

*Two separate installations

Interior Detail - 5104 Thatcher Road

Flooring: *12"x12" vinyl tile/Concrete slab/Carpet on tile
Ceiling Construction: Cellulose laminate acoustic tile/Exposed steel deck
Wall Construction: Painted sheetrock/Masonry block
Lighting: Fluorescent
Insulation:
Structural: None observed
Plumbing/Boiler: None observed
HVAC: None observed
Heating System: Gas-forced air

*Two separate installations

Interior Detail - 5108 Thatcher Road

Flooring: *12"x12" vinyl tile/Concrete slab

Ceiling Construction: Cellulose laminate acoustic tile/Exposed steel deck

Wall Construction: Painted sheetrock/Masonry block

Lighting: Fluorescent/Mercury vapor

Insulation:

Structural: None observed

Plumbing/Boiler: None observed

HVAC: None observed

Heating System: Gas-forced air

*Two separate installations

Interior Observations

Stains:

| <u>Location</u> | <u>Product</u> | <u>Random/Chronic</u> |
|-----------------|-----------------------------------|-----------------------|
| Unit 5108 | Petroleum (Compressor release) | Random |
| Unit 5100 | Petroleum (Drum spill) | Random |

Drains:

| <u>Location</u> | <u>Effluent Connection</u> |
|-----------------------------------|--------------------------------|
| Unit 5100 (Triple catch basin) | Municipal sewer system |

Sumps:

| <u>Location</u> | <u>Effluent Connection</u> |
|-----------------|--------------------------------|
| Unit 5100 | Municipal sewer system |

Storage Drums:

| <u>Location</u> | <u>Number</u> | <u>Contents</u> | <u>Secondary Containment</u> |
|-----------------|---------------|-----------------|----------------------------------|
|-----------------|---------------|-----------------|----------------------------------|

| | | | |
|-----------|---------------|-----------|----|
| Unit 5100 | (5) 55-gallon | Motor oil | No |
|-----------|---------------|-----------|----|

Note: No vehicle maintenance provided on-site. Motor oil inventory not used.

Storage Tanks: None observed

Waste Streams:

| <u>Non-hazardous</u> | <u>Special</u> | <u>Hazardous</u> |
|----------------------|----------------|------------------|
| Yes | No* | No |

*All waste oil previously generated was recycled

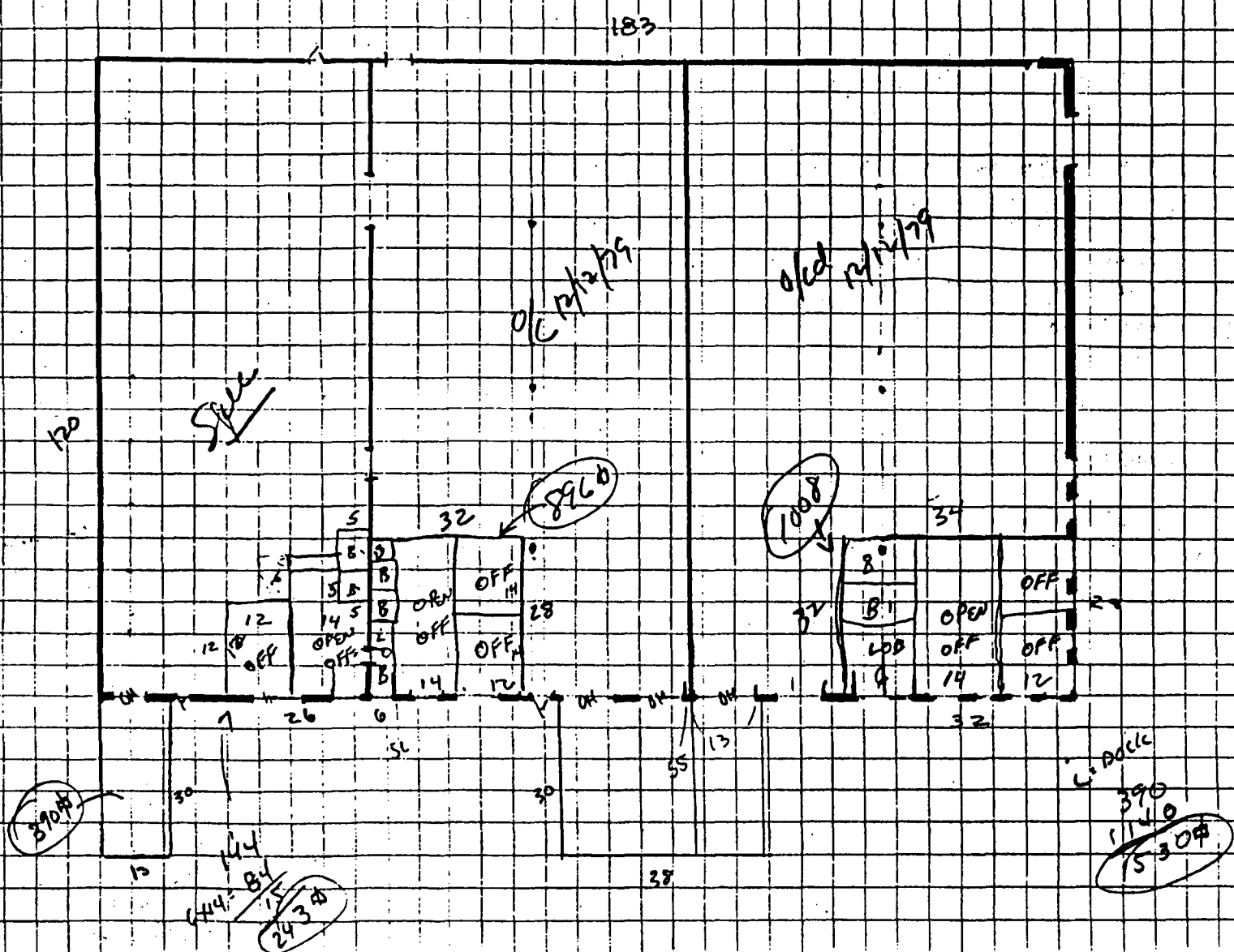
Other: None

Asbestos Survey

| | <u>Composition</u> (Identified/Suspect) | <u>Estimated</u> <u>Volume</u> | <u>Condition</u> | <u>Sample</u> <u>Y/N</u> |
|------------------------------------|--|-----------------------------------|------------------|-----------------------------|
| <i>Structural Insulation:</i> | None observed | | | |
| <i>Pipe Insulation:</i> | None observed | | | |
| <i>Wall Surfacing Material:</i> | None observed | | | |
| <i>Ceiling Surfacing Material:</i> | None observed | | | |
| <i>Floor Tile:</i> | | | | |
| Unit 5100 | 12"x12" vinyl | * **2304 sq.ft. | Good | N |
| Unit 5104 | 12"x12" vinyl | * ** 936 sq.ft. | Good | N |
| Unit 5108 | 12"x12" vinyl | **1008 sq.ft. | Good | N |
| <i>Roofing Felt:</i> | Not accessible | | | |
| <i>Asphalt Shingle:</i> | Not applicable | | | |
| <i>Wallboard:</i> | Gypsum | | | |
| <i>Ceiling Tile:</i> | Cellulose laminate | | | |
| <i>Boiler Insulation:</i> | Not applicable | | | |
| <i>Duct Insulation:</i> | None observed | | | |
| <i>Other:</i> | *Both exposed and under carpet **Two separate installations | | | |

Radon Survey

Radon studies conducted by the State of Illinois Department of Nuclear Safety in 1987-1988 indicates a geometric mean radon concentration of 4.40 pCi/L was found in 166 test sites throughout the county. Because of the site specific nature of radon concentrations, testing of the subject property is the only way to definitively document specific radon concentrations. There are presently no regulations requiring testing or mitigation of radon in any type of building not owned or operated by the federal government (see Countywide Radon Screening Addendum).



III. SITE RECONNAISSANCE

EDI was accompanied by Penny Green, representing Robert L. Green, owner

Surface Description:

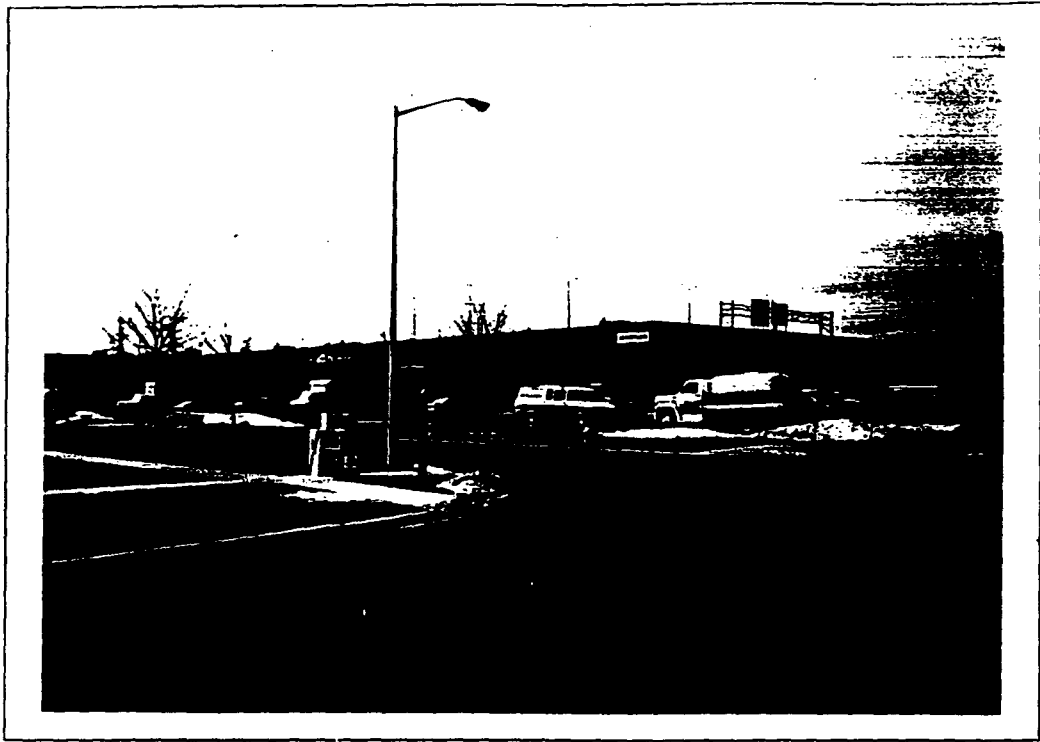
| | |
|-----------------------|---|
| Shape: | Rectangular |
| Topography: | Moderately-sloped |
| Parking area: | Asphalt-paved, located north and east of the building |
| Landscaping: | Property perimeter |
| Drive access: | Two from Thatcher Road |
| Drainage conduits: | A storm water drainage conduit runs parallel to the west property line within a fenced easement owned by the Illinois Tollway Authority |
| Arterial description: | Asphalt-paved, curbed |
| Other: | None |

Utility Easement:

| <u>Location</u> | <u>Number & Type</u> | <u>Faceplate</u> | <u>Surface Staining</u> |
|---------------------|--------------------------|------------------|-------------------------|
| North property line | None | N/A | N/A |
| South property line | One pad-mounted | No | No |
| East property line | None | N/A | N/A |
| West property line | Two pad-mounted | No | No |

| | |
|--------------------------|----------------|
| <i>Storage Drums:</i> | None observed |
| <i>Storage Tanks:</i> | None observed. |
| <i>Odors:</i> | None detected |
| <i>Pools of Liquid:</i> | None observed |
| <i>Dust Suppressant:</i> | Not applicable |
| <i>Air Emissions:</i> | Not applicable |

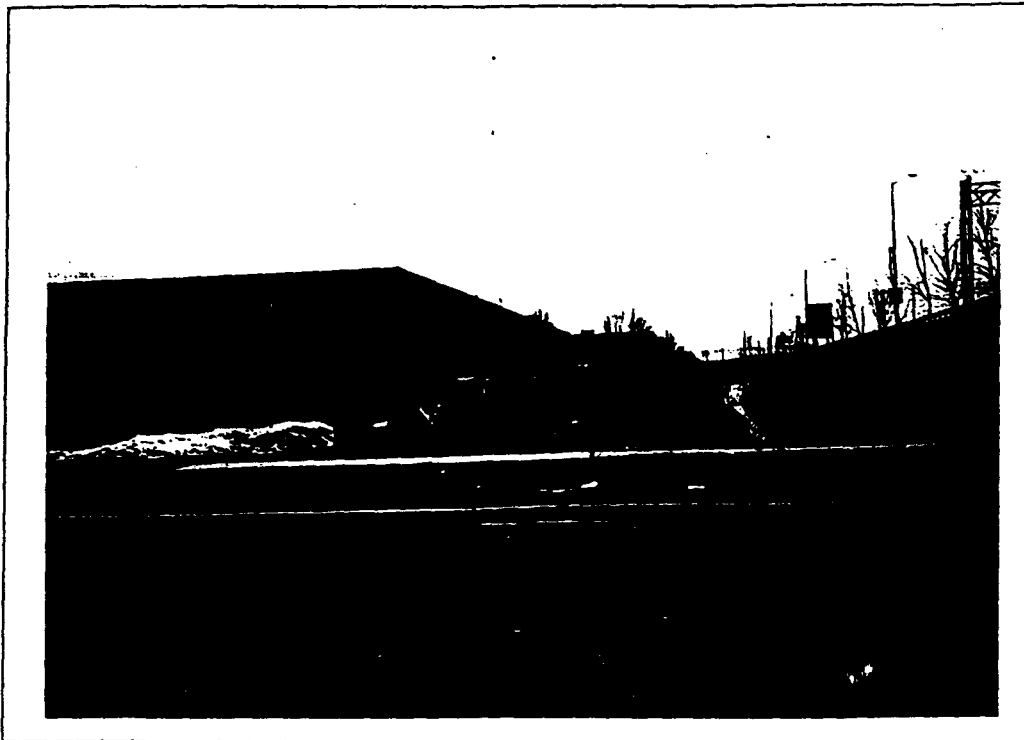
| | |
|---|---|
| <i>Hazardous Waste Storage Activity-Adjacent:</i> | None observed |
| <i>Pits, Ponds or Lagoons:</i> | None observed |
| <i>Stained Soil/Pavement:</i> | Random petroleum stains from vehicle parking observed on the asphalt surface |
| <i>Stressed Vegetation:</i> | None observed |
| <i>Surface Debris:</i> | None observed |
| <i>Solid Waste Incineration:</i> | None observed |
| <i>Sewage Disposal System:</i> | Separate sanitary/stormwater |
| <i>Catch Basin/Storm Sewer:</i> | Two storm sewer connections are located at the base of the exterior loading docks. Two additional storm sewer connections are located within the paved parking area. Three sanitary sewer connections are located east of the building. |
| <i>Permitted Waste Water Discharge:</i> | Not applicable |
| <i>Injection (dry) Wells:</i> | None observed |
| <i>Water Wells:</i> | None observed |
| <i>Septic Systems:</i> | Not applicable |
| <i>Potable Water Supply:</i> | Lake Michigan |
| <i>Other:</i> | None |



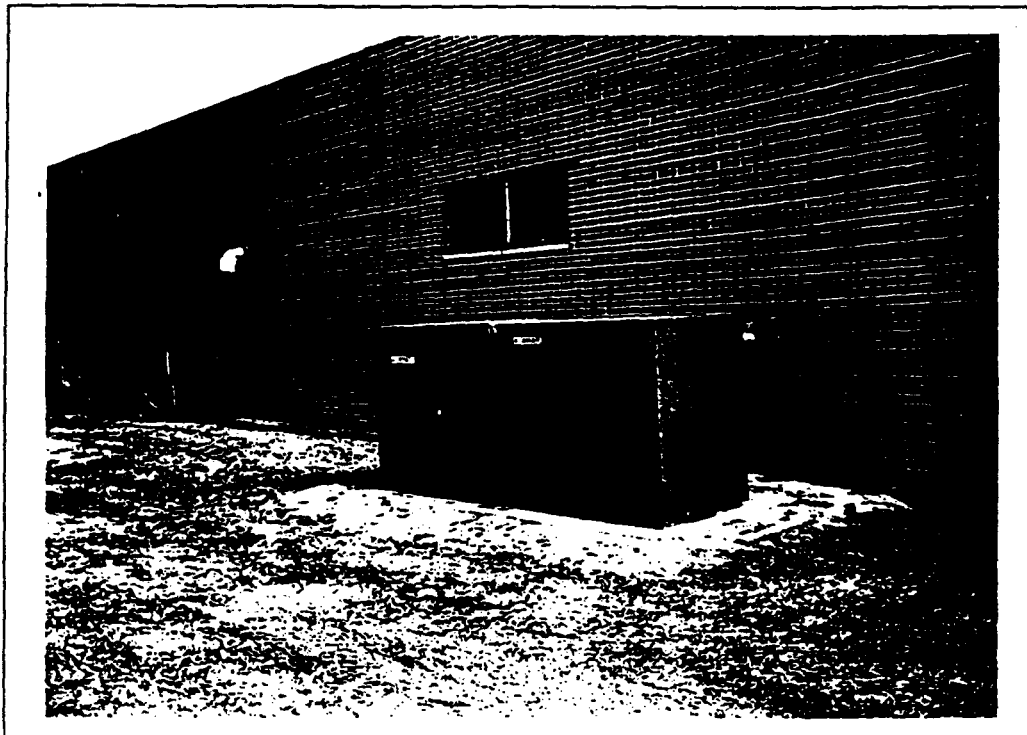
North and west building elevations



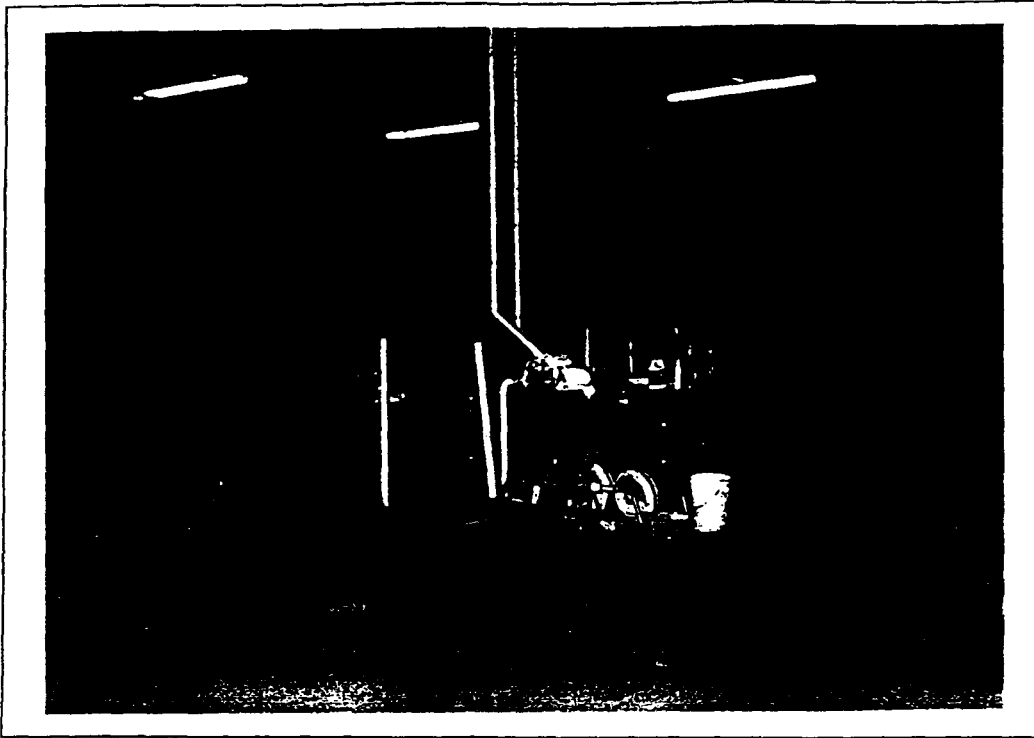
South building elevation



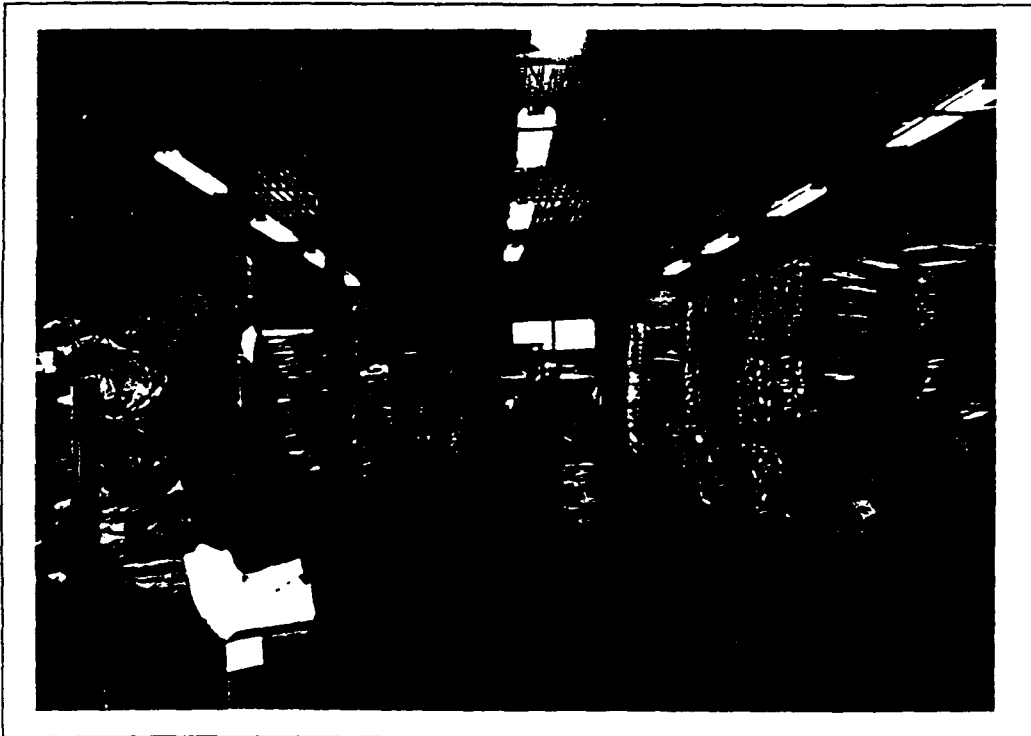
West building elevation



Two pad-mounted electrical transformers, west building perimeter



Waste oil drum storage, Unit 5100



Fertilizer storage, Unit 5104



Waste oil (compressor) release, Unit 5108



Compressor release valve, rear of Unit 5108. Surficial staining.

ENVIRONMENTAL
DISCOVERY INC.105 WEST JACKSON STREET
NAPERVILLE, IL 60540(708) 416-9410
FAX (708) 416-9290

IV. ENVIRONMENTAL ASSESSMENT QUESTIONNAIRE

The following Environmental Questionnaire is an integral part of the Phase I Assessment process. In addition to providing assistance in researching the history of a property, current site conditions may not accurately represent past activities. Under CERCLA, the federal Comprehensive Environmental Response, Compensation and Liability Act, as revised, 1986, past and present owners of contaminated sites, including lenders, may be liable for remediation even if they did not cause the contamination. Environmental Discovery, Inc. encourages your assistance in determining if a Recognized Environmental Condition, as defined by ASTM Standard E1527, Phase I Environmental Site Assessment Process, exists on the property.

Property address:

5100 Thatcher RdDowners Grove IL 60515

Permanent Index Number (PIN): _____

I. History of Property

1. Property purchase date (current owner):

1980

2. Building construction date:

1980

3. The present and previous owner(s)/occupant(s), and the time period of ownership/occupancy:

Dynagear- occupant1980 - 1994Robert L. Green- owner1980 to presentCurrent tenantsCablevision2-1-92to12-31-96Cannon + Tuft3-1-91to3-31-97Global Gear1-1-94to1-1-99

4. Has an environmental assessment or environmental site inspection been previously conducted for the subject property? Yes _____ No ☒

If yes, what, if any, environmental impairments were identified during this inspection?

5. Has any demolition or construction activity been conducted during the current tenancy? Yes _____ No ☒

Please identify:

6. Are you aware of the past or current existence or operation of any underground storage tanks on the property? Yes _____ No ☒

7. Are you aware of the past or current existence or operation of any aboveground storage tanks on the property? Yes _____ No ☒

8. Are there any of the following specific units (operating or closed) at the property which are or were used by the owner to manage waste, hazardous wastes, hazardous substances or petroleum?

| | YES | NO | | YES | NO |
|--------------------------|-------|-------------------------------------|--------------------------------|-------|-------------------------------------|
| Landfill | _____ | <input checked="" type="checkbox"/> | Injection Wells | _____ | <input checked="" type="checkbox"/> |
| Surface Impoundment | _____ | <input checked="" type="checkbox"/> | Wastewater Treatment Units | _____ | <input checked="" type="checkbox"/> |
| Land Treatment | _____ | <input checked="" type="checkbox"/> | Septic Tanks | _____ | <input checked="" type="checkbox"/> |
| Waste Pile | _____ | <input checked="" type="checkbox"/> | Transfer Stations | _____ | <input checked="" type="checkbox"/> |
| Incinerator | _____ | <input checked="" type="checkbox"/> | Waste Recycling Operations | _____ | <input checked="" type="checkbox"/> |
| Aboveground Storage Tank | _____ | <input checked="" type="checkbox"/> | Waste Treatment Detoxification | _____ | <input checked="" type="checkbox"/> |
| Underground Storage Tank | _____ | <input checked="" type="checkbox"/> | Other Land Disposal Area | _____ | <input checked="" type="checkbox"/> |
| Container Storage Area | _____ | <input checked="" type="checkbox"/> | | | |

9. Are you aware of operations conducted on the property which involve(d) the generation, manufacture, processing, transportation, treatment, storage or handling of any of the following:

Petroleum Products (including heating oil)

Yes _____ No ☒

Asbestos Products

Yes _____ No ☒

Hazardous substances, as defined by the Illinois Environmental Protection Act

Yes _____ No ☒

II. Waste Generation and Disposal (Complete only if the existing business generates hazardous or special waste products, i.e., solvents, waste oil, potentially infectious medical waste, etc.)

10. Identify the waste transportation and disposal contractor:

11. How often is the waste product picked up by the disposal contractor?

12. Estimate, to the best of your knowledge, the maximum amount of waste product accrued prior to pickup.

*Provide a copy, if available, of the most recent signed and dated disposal manifest.

13. Has the owner ever held any of the following in regard to this property?

a. Permits for discharges of wastewater to waters of the State.

Yes _____ No ☒

b. Permits for emissions to the atmosphere.

Yes _____ No ☒

c. Permits for any waste storage, waste treatment or waste disposal operation.

Yes _____ No ☒

14. Has the owner had any wastewater discharges (other than sewage) to a publicly owned treatment works?

Yes _____ No ☒

15. Has the owner taken any of the following actions relative to this property?

a. Prepared a Chemical Safety Contingency Plan pursuant to the Illinois Chemical Safety Act.

Yes _____ No ☒

b. Filed an Emergency and Hazardous Chemical Inventory Form pursuant to the federal Emergency Planning and Community Right-to-Know Act of 1986.

Yes _____ No ☒

c. Filed a Toxic Chemical Release Form pursuant to the federal Emergency Planning and Community Right-to-Know Act of 1986.

Yes _____ No ☒

16. Has the owner or any facility on the property or the property been the subject of any of the following state or federal governmental actions?

- a. Written notification regarding known, suspected or alleged contamination on or emanating from the property. Yes _____ No X
- b. Filing an environmental enforcement case with a court or the Pollution Control Board for which a final order or consent decree was entered. Yes _____ No X
- c. If item (b) was answered "YES", then indicate whether or not the final order or decree is still in effect for this property. Yes _____ No _____

III. Environmental Releases During Ownership

17. Has any situation occurred at this site which resulted in a reportable "release" of any hazardous substances or petroleum as required under state or federal laws? Yes _____ No X
18. Have any hazardous substances or petroleum come into direct contact with the ground at this site? Yes _____ No X

If the answers to questions (17) and/or (18) are "YES", have any of the following actions or events been associated with a release on the property:

- _____ Use of a cleanup contractor to remove or treat material including soils, pavement or other surficial materials
- _____ Assignment of in-house maintenance staff to remove or treat materials including soils, pavement or other surficial materials
- _____ Designation, by the IEPA or the IEMA, of the release as "significant" under the Illinois Chemical Safety Act
- _____ Sampling and analysis of soils
- _____ Temporary or more long-term monitoring of groundwater at or near the site
- _____ Impaired usage of an on-site or nearby water well because of offensive characteristics of the water
- _____ Coping with fumes from subsurface storm drains or inside basements, etc.
- _____ Signs of substances leaching out of the ground along the base of slopes or at other low points on or immediately adjacent to the site

19. Is the facility currently operating under a variance granted by the Illinois Pollution Control Board? Yes _____ No X

Signed: Robert L. Green

Date: 3/23/94

Company: Dynagear Inc

Title: CEO

V. ENVIRONMENTAL RECORDS REVIEW

The following databases were reviewed to identify documented material storage activities, waste storage activities and waste disposal activities conducted on the subject property, and on facilities located within a one-mile radius of the subject. The individual databases have been cross-referenced to the Facility Index System ("FINDS") database, which is a compilation of regulated facilities. Activity sites located within a one-mile radius of the subject property, as identified by the individual databases and/or the FINDS database, are digitally plotted on the following maps. All of the databases referenced below are reviewed during the address matching procedure. Note that some databases may have no application to a particular site.

Those facilities identified as Hazardous Waste Activity sites and Hazardous Material Usage/Storage sites are identified on the accompanying maps as "HWAS;" Underground Storage Tank locations are identified by the acronym "UST;" and, Leaking Underground Storage Tank sites are identified as "LUST" locations. All of the identified activity sites are plotted with the corresponding icon. The "NPL" subset of HWAS includes Response Action Sites; National Priority Listing Sites; State Remedial Action Priority Listing; Proposed National Priority Listing Sites; Completed Remedial Action Sites; Noticed/Pre-Noticed Sites; Federal Facilities; and, Cleanups Started and/or Completed.

Detailed activity information, including a straight-line distance calculation presented in one-hundredth mile increments, is provided according to a maximum radius identified as "Search Distance" below. The ASTM recommended minimum search distance is presented for comparison:

| <i>Database</i> | <i>Search Distance</i> | <i>ASTM Standard</i> |
|-------------------------|------------------------|----------------------|
| Federal CERCLIS list | 0.5 miles | 0.5 miles |
| State UST list | 0.5 miles | Subject and adjacent |
| State LUST list | 0.5 miles | 0.5 miles |
| Federal RCRA generators | 0.5 miles | Subject and adjacent |
| Federal ERNS list | 0.5 miles | Subject only |
| Federal NPL list | City/County | 1.0 miles |
| Federal RCRA TSD | 0.5 miles | 1.0 miles |
| State NPL/CERCLIS | City/County | 1.0 miles |
| HWAS | 0.5 miles | Not required |

All databases are updated quarterly, on the first Monday following the first day of January, April, July and September.

NOTE: Sites are identified by the Emergency Response Notification System ("ERNS") by discharger location and/or release point location. If a street address has been provided for either location, the ERNS site has been geocoded and plotted within a one-half mile radius. An orphan ERNS list, including individual spill reports, is provided upon request.

The "NPL" subset is identified by federal and state sources by city, county and state; street addresses are not provided. NPL locations which match the subject property city and county are presented in tabular format only. NPL sites for which city information is not provided, but are located within the subject property county, are also presented in the accompanying tables.

Geocoding accuracy: During the address matching process, an eight (8) pass procedure is used, including assignment of 5-digit and 9-digit zip codes. In these procedures, different relaxation parameters are used in a sequence designed to give the highest accuracy and highest match rate. This process allows for an approximate 80% match rate of the entire site universe. The accuracy to which a particular site can be assigned a latitude and longitude is based upon its specified address in the government record. Verified addresses are accurate within approximately +/- 100 feet of the true geographic location at a 95 % confidence level.

Sites with incomplete addresses in the government records, and which cannot be geocoded, are included in the Orphan List. The Orphan List is a compilation of database locations which cannot be mapped due to incorrect or incomplete street address, city or zip code information. The Orphan List is limited to unplotted locations within the subject property city, and may not represent all unplotted locations within a one-half mile radius of the subject site.

Hazardous Waste Activity

- CERCLIS:** Comprehensive Environmental Response, Compensation and Liability Information System
Legislation: Comprehensive Environmental Response, Compensation and Liability Act.
Type of Facility: Potentially uncontrolled hazardous waste sites, Superfund sites.
- RCRIS:** Resource Conservation & Recovery Act Information System
Legislation: The Resource Conservation and Recovery Act of 1976, Hazardous Solid Waste Amendments.
Type of Facility: Hazardous waste generators and transporters.
- TSDR:** Treatment, Storage, Disposal and Recycling Facilities
Legislation: The Resource Conservation and Recovery Act of 1976
Type of Facility: USEPA permitted aqueous treatment facilities; PIMW facilities; incinerators; secondary fuel blenders; precious metals recovery; solid waste treatment facilities; solvent reclaimers; and, waste oil recyclers
- AFS/AIRS:** Aerometric Information Retrieval System
Legislation: Clean Air Act.
Type of Facility: Facilities which are monitored or permitted for air emissions under the Clean Air Act. Includes compliance status and enforcement actions.
- DOCKET:** Enforcement Docket System
Legislation: All environmental statutes.
Type of Facility: Facilities with civil judicial and administrative enforcement cases.
- TRIS:** Toxic Release Inventory System
Legislation: Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendment/Reauthorization Act).
Type of Facility: Facilities that release any of the more than 300 extremely hazardous substances, stipulated in the reporting rule, that are in excess of threshold amounts.
- ERNS:** Emergency Response Notification System
Legislation: State Environmental Laws and Statutes
Type of Facility: Facilities submitting oil and hazardous release notifications to the U.S. Coast Guard.
- NPL:** Federal National Priorities List
Identification of federally designated "Superfund" sites.
- DOE:** U.S. Department of Energy
Identification of active & inactive radioactive waste sites requiring remedial action.
- PCS:** Permit Compliance System
Legislation: Clean Water Act, Federal Water Pollution Control Act Amendments of 1972, Water Quality Act of 1987.
Type of Facility: Facilities with active water discharge permits.
- STATE:**
Legislation: State Environmental Laws and Statutes
Type of Facility: This particular category shows if the facility is regulated by a state environmental program.

Hazardous Material Usage/Storage

- PADS: PCB Activity DATA System
Legislation: Toxic Substances Control Act (TSCA).
Type of Facility: PCB generator, storer, transporter or permitted disposer.
- CICIS: Chemicals in Commerce Information System
Legislation: Toxic Substances Control Act (TSCA).
Type of Facility: Chemical manufacturers who submitted chemical production information in response to the 1977 TSCA inventory rule.
- FATES: FIFRA & Section 7 Tracking System
Legislation: Federal Insecticide, Fungicide and Rodenticide Act, Section 7.
Type of Facility: Corporations or facilities involved with pesticide production.
- CUS: Chemical Update System
Legislation: Toxic Substances Control Act (TSCA).
Type of Facility: Facilities which manufactured or imported in excess of 10,000 pounds of specific toxic chemicals during the preceding fiscal year.

Aboveground Storage Tank (AST)/Underground Storage Tank (UST)

- UST: Illinois Office of the State Fire Marshal, UST Log

Note: EDI also reviews tank installation and removal permit records maintained by municipal building departments, the Chicago Department of Environment Tank Desk, and local fire departments. Tanks identified on the subject site through these sources are not plotted on the accompanying maps, but are noted within the project report.

- LUST: Illinois Environmental Protection Agency
Leaking Underground Storage Tank Incident Reports

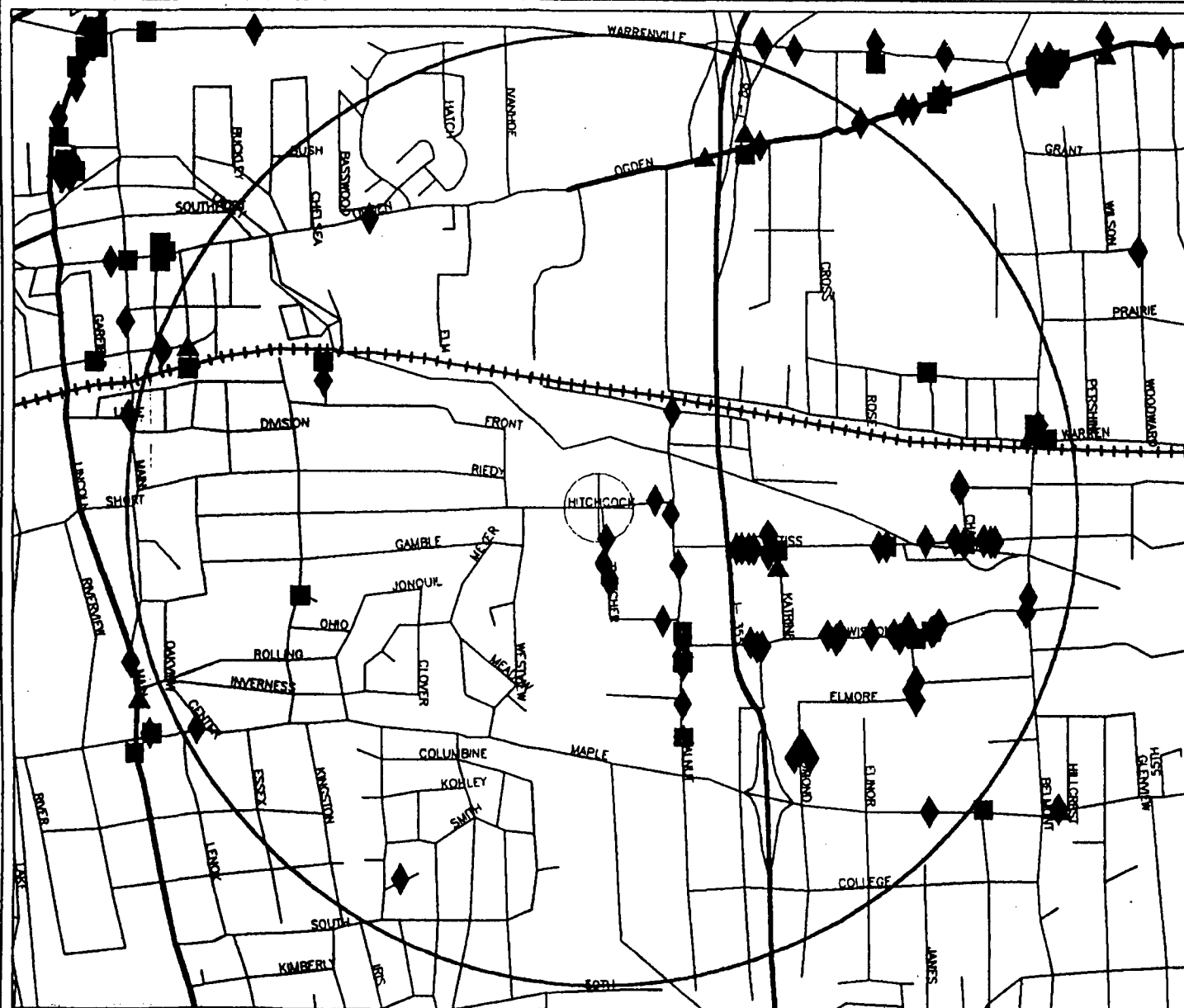
Lust Disclaimer: This list is a non-verified, unconfirmed listing, and should not be used or considered as a final Agency determination regarding whether releases have occurred at reported sites. Sites have been included on this list based on reports of releases at the site received by the Emergency Services and Disaster Agency ("ESDA"). The IEPA is in the process of confirming the type and size of release, if any.

Waste Disposal Facilities

- HISWD: Historical Inventory of Solid Waste Disposal Facilities
Identification of known historical landfill sites.
- SIA: Surface Impoundment Assessment
Identification of known surface impoundments.

5100-5108 Thatcher Road, Downers Grove, IL

Site Activity Map



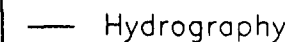
Legend



Buffer_1.0



Highways



Hydrography



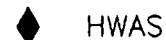
Railroads



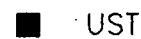
Roads

1.0 mile radius

Source



HWAS



UST



LUST

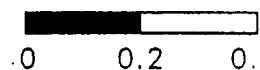


SITE

Date 03/03/94

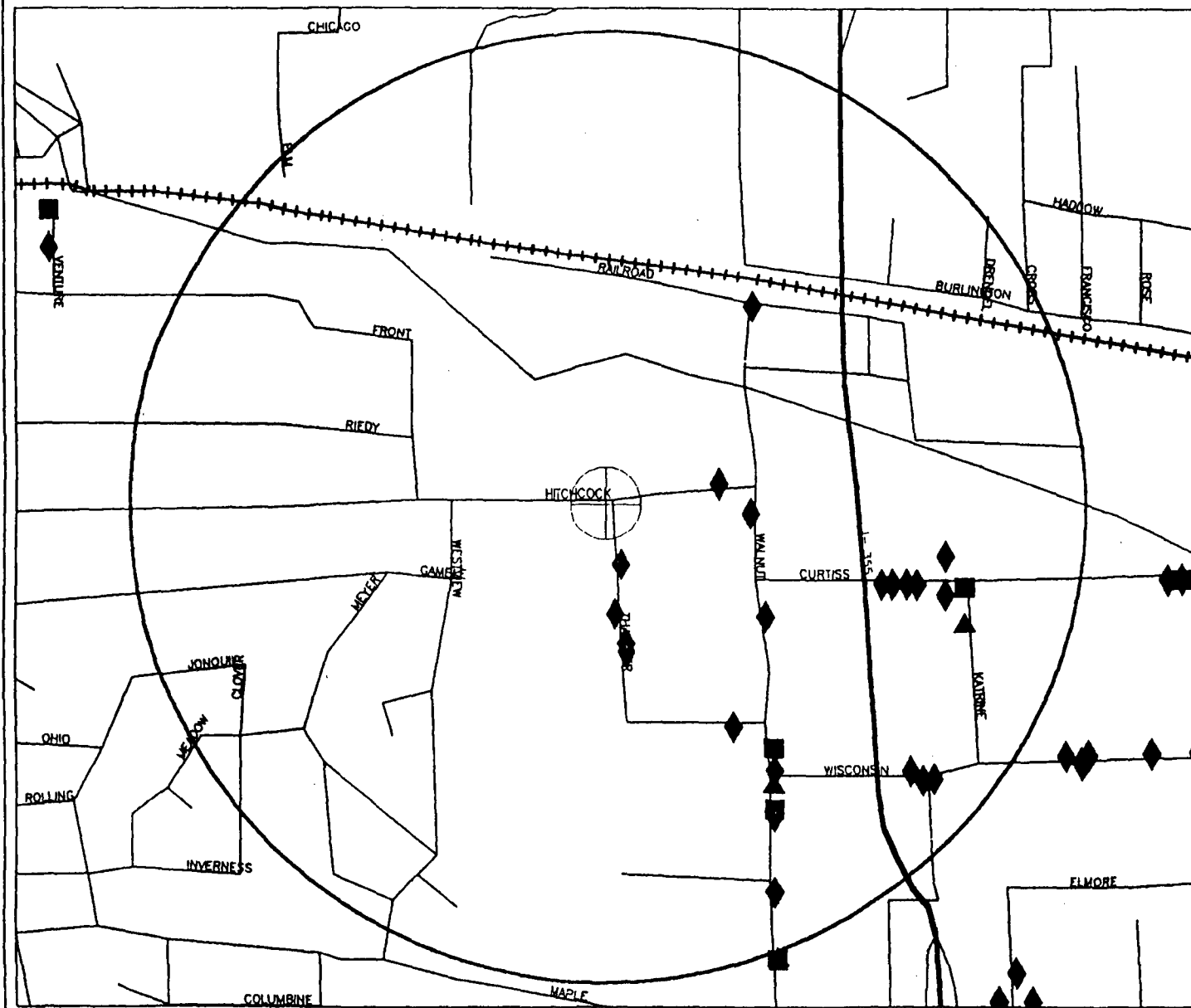
**Environmental
Discovery, Inc.**
Naperville, IL

Miles



5100-5108 Thatcher Road, Downers Grove, IL

Site Activity Map



Legend

□ Buffer_0.5

— Highways

— Hydrography

+++ Railroads

— Roads

0.5 mile radius

Source

◆ HWAS

■ UST

▲ LUST

⊕ SITE

Date 03/03/94

**Environmental
Discovery, Inc.**
Naperville, IL

Miles

0 0.1 0.2

| EPAID | NAME | ADDRESS | SOURCE | SOURCE | SOURCE | SOURCE | DISTANCE |
|--------------|------------------------------|------------------------|----------|----------|----------|--------|----------|
| ILD984808733 | QUALITY ANALYTICAL LABS INC | 5157 THATCHER | RCRIS | | | | 0.06 |
| ILD121270540 | UNIVERSITY PRINTING SERVICES | 5200 S THATCHER RD | RCRIS | | | | 0.11 |
| ILD018214981 | BALES MOLD SERV INC | 2824 HITCHCOCK | RCRIS | | | | 0.12 |
| ILD984849588 | MC CAHILL PAINTINGS | 5229 THATCHER | RCRIS | | | | 0.14 |
| ILD982614042 | MADDEN JOE FORD | 5126 S WALNUT | RCRIS | | | | 0.15 |
| ILD984785717 | MC CAHILL PAINTING CO | 5237 THATCHER RD | RCRIS | | | | 0.15 |
| ILD060362274 | MOLEX INC | 5225 WALNUT ST | RCRIS | TRIS | | | 0.20 |
| ILD000672071 | DOWNERS GROVE SAN DIST WWTG | WALNUT & RAILROAD AVES | RCRIS | | | | 0.26 |
| ILD984811794 | SEATT CORP | 2820 THATCHER RD | AFS/AIRS | | | | 0.27 |
| ILD982063869 | KASPAR WALTER SERVICE | 2747 CURTISS AVE | RCRIS | | | | 0.30 |
| ILD055421705 | WALBERG ARVID C & CO INC | 2741 CURTISS ST | RCRIS | | | | 0.31 |
| ILD981101389 | CONTEMPORARY CONTROLS | 2733 CURTISS ST | RCRIS | | | | 0.32 |
| ILD984829986 | MONTGOMERY WARD AND CO | 5365 S WALNUT | RCRIS | | | | 0.33 |
| ILD984782706 | HILTY | 2727 CURTISS ST | RCRIS | | | | 0.34 |
| ILD021304639 | DOWNERS GROVE SAN DIST | 2710 CURTISS ST | PCS | | | | 0.36 |
| | DOWNERS GROVE SANITARY | 2710 CURTISS ST | ERNS | | | | 0.37 |
| ILD041541020 | ADHESIVE BINDING CORP | 5375 WALNUT ST | AFS/AIRS | AFS/AIRS | | | 0.37 |
| ILD984907972 | WPC MACHINERY CORP | 2700 WISCONSIN | RCRIS | | | | 0.42 |
| ILD025415266 | MORRY CORP | 2659 WISCONSIN AVE | RCRIS | AFS/AIRS | AFS/AIRS | | 0.44 |
| ILD980614242 | LOVEJOY ELECTRONICS INC | 5411 WALNUT | RCRIS | | | | 0.44 |
| ILD039344809 | LOVEJOY INC | 2655 WISCONSIN AVE | RCRIS | | | | 0.45 |
| ILD984848564 | NORWOOD MARKING SYSTEMS | 2538 WISCONSIN AVE | RCRIS | AFS/AIRS | | | 0.55 |
| ILD984820936 | HEUFT USA | 2512 WISCONSIN AVE | RCRIS | | | | 0.56 |
| ILD984789776 | CVP SYSTEMS INC | 2518 WISCONSIN AVE | RCRIS | RCRIS | | | 0.57 |
| ILD005094230 | FLEXIBLE STEEL LACING CO | 2525 WISCONSIN AVE | RCRIS | AFS/AIRS | AFS/AIRS | | 0.57 |
| ILD005163811 | AMES SUPPLY CO | 2537 CURTISS | RCRIS | | | | 0.59 |

UNDERGROUND STORAGE TANK SITES (UST) PAGE 1
5100-5108 Thatcher Road, Downers Grove, IL

| UST ID # | NAME | ADDRESS | CONTACT | PHONE | TANKS | STATUS | DISTANCE |
|----------|-------------------------|------------------|-----------------|---------------|-------|--------|----------|
| 2-005471 | BAKER MOTOR EXPRESS INC | 5355 WALNUT ST | HANNAN, WM. T. | (312)969-0099 | 1 | ACTIVE | 0.31 |
| 2-012787 | MONTGOMERY WARD | 5365 WALNUT | HAMILTON, LARRY | (312)960-5750 | 2 | ACTIVE | 0.36 |
| 2-022742 | MOLEX INC | 5224 KATRINE AVE | MOORE TIM | (312)969-4550 | 1 | ACTIVE | 0.38 |
| 2-028725 | DOWNERS GROVE ICEARENA | 5501 WALNUT AVE | GLASSFORD R | (815)971-3780 | 0 | CLOSED | 0.51 |

LEAKING UNDERGROUND STORAGE TANK SITES (LUST)

PAGE 1

5100-5108 Thatcher Road, Downers Grove, IL

| LUST ID # | NAME | ADDRESS | CITY | INCIDENT # | DISTANCE |
|------------|-----------------------------|------------------|---------------|------------|----------|
| 0430305152 | BAKER MOTOR EXPRESS INC. | 5355 WALNUT ST. | DOWNERS GROVE | 912371 | 0.34 |
| 0430305011 | MOLEX, INC. | 5224 KATRINE AVE | DOWNERS GROVE | 880876 | 0.39 |
| 0430305163 | DOWNERS GROVE ICE ARENA LTD | 5501 WALNUT AVE. | DOWNERS GROVE | 920115 | 0.51 |

5100-5108 Thatcher Road, Downers Grove, IL

ERNS ID:254909

REPORTED BY LOCAL GOVERNMENT

DISTANCE:0.37

DISCHARGER INFORMATION:

DOWNERS GROVE SANITARY

2710 CURTISS ST

DOWNERS GROVE, IL 60515

REPORTED:02/24/92 @ 1431 RELEASED:02/23/92 @ 1800

EPA REGION NOTIFIED: 5 RELEASE EPA REGION: 5

RELEASE OCCURED IN:DOWNERS GROVE, IL DU PAGE

THERE WERE 20 EVACUATED PEOPLE

CALLER NOTIFIED: ESDA, FIRE DEPT

WATERWAY AFFECTED: ATMOSPHERE

TRANSPORT MODE WAS: FIXED FACILITY

NOTIFIED PARTIES AT TIME OF RELEASE: STATE OTHER

EVACUATION WAS REQUIRED

SPILL CONTAINED IN: AIR

MATERIAL:SULFUR DIOXIDE

CHRIS CODE:SFD

DESCRIPTION OF RELEASE:

SULFUR DIOXIDE CYLINDER/SMALL HOLE DEVELOPED DUE TO UNKNOWN CAUSE

LOCATION OF RELEASE:

WASTE WATER TREATMENT PLANT AT WALNUT AND

RAILROAD AVE

ACTION TAKEN:

FIRE DEPT & CHEMICAL SUPPLIER ON SCENE, LEAK SECURED

MISCELLANEOUS INFORMATION ABOUT RELEASE:

MATERIAL CONFINED TO THE BUILDING, 20 AREA RESIDENTS EVACUATED AS A PRECAUTION,

NAME

CITY

COUNTY

NOTE

SPREEMAN OIL

DOWNERS GROVE

DUPAGE

5100-5108 Thatcher Road, Downers Grove, IL

| EPAID | NAME | ADDRESS | SOURCE | SOURCE | SOURCE | SOURCE |
|--------------|--------------------------------|---------------------------------|----------|----------|----------|----------|
| ILD005146717 | PACKARD INSTRUMENT CO | 2200 WARRENSVILLE RD | RCRIS | TRIS | AFS/AIRS | AFS/AIRS |
| ILD084734672 | MAPLE AUTO BODY INC | 21 W 240 MAPLE AVE | RCRIS | | | |
| ILD980988539 | COM ED PCB SPILL POWERS RESIDE | 739 RODGERS | FATES | | | |
| ILD981958382 | DOWNERS GROVE PUBLIC WELLS 5 & | SEE LAT/LONG | CERCLIS | | | |
| ILD982619405 | TRIMCLEANERS | 1202 T W 75TH ST | RCRIS | | | |
| ILD984787036 | EMRO MARKETING NO 7450 | 898 W OGAEN | RCRIS | | | |
| ILD020962247 | VILLAGE VALET CLEANERS | 7 S 042 MAIN ST | RCRIS | | | |
| ILD053529939 | BISCO INC | 3010 J WOODCREEK DR | RCRIS | | | |
| ILD074392218 | JOHNSTON PUMP | 1429 CENTRE CIRCLE | RCRIS | | | |
| ILD984791145 | BORG PONTIAC INC | 2300 CEDER AVE | RCRIS | | | |
| ILD984796045 | PRAIRIE MTRL SALES | 35TH ST & FINLEY RD | AFS/AIRS | AFS/AIRS | | |
| ILD984818955 | DUPAGE FOREST PRES DIST LEMONT | DAVEY RD 1/2 MI W OF ORCHARD RD | RCRIS | | | |
| ILD984832626 | ONE HOUR CLEANERS | 21 W 265 MAPLE | RCRIS | | | |
| ILD984833996 | THORNTON OIL | 1015 W OGDEN | RCRIS | | | |
| ILD984844290 | SHELL OIL CO | 336 OGDEN AVE B | RCRIS | | | |
| ILD984911784 | SHELL OIL CO | 2212 TO 50 OGDEN AND BELMONT | RCRIS | | | |
| ILD984917765 | AMOCO 18678 | 402 OGDEN & FAIRVIEW | RCRIS | | | |

| UST ID # | NAME | ADDRESS | CONTACT | PHONE | TANKS | STATUS |
|----------|----------------------------------|------------------------|----------------------|----------------|-------|------------|
| 2-010344 | AMOCO CORP | SW MAIN ST & OGDEN AVE | DAUL, CHARLES M. | (312)827-9681 | 4 | ACTIVE |
| 2-022785 | AMOCO CORP | NW 75TH & LEMONT RD | DAUL, CHARLES M. | (312)827-96,81 | 3 | ACTIVE |
| 2-023200 | AMOCO CORP | NW OGDEN & FAIRVIEW | DAUL, CHARLES M. | (312)827-9681 | 4 | ACTIVE |
| 2-023099 | AMOCO CORP | BELMONT & MAPLE | DUAL, CHARLES M. | (312)827-9681 | 3 | ACTIVE |
| 2-022905 | AMOCO CORP | 63RD & MAIN | DAUL, CHARLES M. | (312)827-9681 | 3 | ACTIVE |
| 2-024912 | CHICAGO OSTEOPATHIC MEDICAL CENT | 355 31ST ST | POSEY CHARLES | (708)971-6098 | 1 | ACTIVE |
| 2-030807 | DIVINE SAVIOR PARISH | 67TH & MAIN ST | PIETRAS REV ROBERT E | (708)969-1532 | 1 | ACTIVE |
| 2-029753 | DOWNERS GROVE GRADE SCHOOL 58 | 6036 SLODGETT | BUBULA RICK | (708)719-5858 | 0 | EXEMPT |
| 2-003069 | DOWNERS GROVE SANITARY DIST | WALNUT & RAILROAD | SMITH, R E. | (312)969-0664 | 1 | ACTIVE |
| 2-014562 | EMRO MARKETING COMPANY | 898 W OGDEN | FORSHAM, H. A. | (312)335-0600 | 5 | ACTIVE |
| 2-014244 | FIRESTONE TIRE & RUBBER | SE OGDEN & WASHINGTON | KUGELBERG, K | (312)852-1600 | 1 | ACTIVE |
| 2-012481 | FOOTE JONES DRESSER INDUST INC | 55 ROGERS ST | MILLER W. WARD | (312)471-3040 | 2 | ACTIVE |
| 2-017600 | JUST BRAKES | 560 BELMONT RD | YURKOVICH DANIEL D | (312)964-2121 | 1 | ACTIVE |
| 2-029929 | POWER TECH INTERNATIONAL INC | 603 ROGERS ST PLANT 3 | - | (312)968-5400 | 0 | NOT REGIST |
| 2-024590 | SHELL OIL CO | 2212-50 OGDEN AVE | KOERDEN, H. H. | (312)960-2008 | 3 | ACTIVE |
| 2-006909 | SHELL OIL CO | 108281 LEMONT RD | FATLA, JOE & JEROME | (312)985-7838 | 3 | ACTIVE |
| 2-007079 | SPEEDWAY PETRO DIV EMRO MKRT CO | 8301 LEMONT RD | LOWE, D J. | (317) 243-7500 | 3 | ACTIVE |
| 2-027655 | THE IL TOLL HIGHWAY AUTHORITY | N/S TOLLWAY MP21.9 | COLLINS TIM | (708)574-2000 | 2 | ACTIVE |
| 2-029682 | THE IL TOLL HWY AUTH | MILE POST 19.8 1 AUTH | CHIEF ENGINEER | (708)574-2000 | 0 | NOT REGIST |
| 2-009538 | VOREL CO INC | 2020 W OGDEN AVE | CARBONE, JOSEPH | (312)964-9500 | 2 | ACTIVE |

LEAKING UNDERGROUND STORAGE TANK SITES (LUST) ORPHAN LIST

PAGE 1

5100-5108 Thatcher Road, Downers Grove, IL

| LUST ID # | NAME | ADDRESS | CITY | INCIDENT # |
|------------|---------------------------|---------------------|---------------|------------|
| 0430300019 | EMRO MARKETING | 898 W OGDEN | DOWNERS GROVE | 901692 |
| 043..... | NO NAME | RT. 53 & MAPLE AVE. | DOWNERS GROVE | 861223 |
| 0430305136 | DIOCESE OF JOLIET | 444 E. WILSON | DOWNERS GROVE | 910867 |
| 0430305114 | ILLINOIS BELL CO. | 4924 FORREST | DOWNERS GROVE | 903727 |
| 0430305094 | SHELL OIL RETAIL GASOLINE | OGDEN AND FAIRVIEW | DOWNERS GROVE | 891320 |
| 0430305148 | SOUTHLAND CORP | 63RD & MAIN ST. | DOWNERS GROVE | 912105 |
| 043..... | UNK | 63RD AND MAIN | DOWNERS GROVE | 891148 |
| 0430305121 | UNOVEN CO. | 1201 EAST OGDEN | DOWNERS GROVE | 903402 |

VI. PRIOR USE INVESTIGATION

Interview with: Robert L. Green
Property purchase date: 1980
Conditions at time of purchase: Vacant and unimproved
Building construction date: 1980
Prior owner: Not identified
Prior use(s): Vacant and unimproved

Sanborn Maps

EDI attempted to review Sanborn Fire Insurance Maps of the subject and adjacent sites. These maps provide an historical perspective of property use, as well as the construction type and outline of buildings. Coverage of the immediate area is not available.

Historical Aerial Photographs

EDI obtains and reviews historical aerial photographs in an effort to confirm the prior use(s) of the subject and adjoining properties. These photographs typically date to 1949.

Photograph date: April 13, 1956

Subject description: Cropland

Adjoining sites:

North-Residentially improved

South-Cropland

East-Cropland

West-Cropland

Photograph date: April 26, 1975

Subject description: Cropland

Adjoining sites:

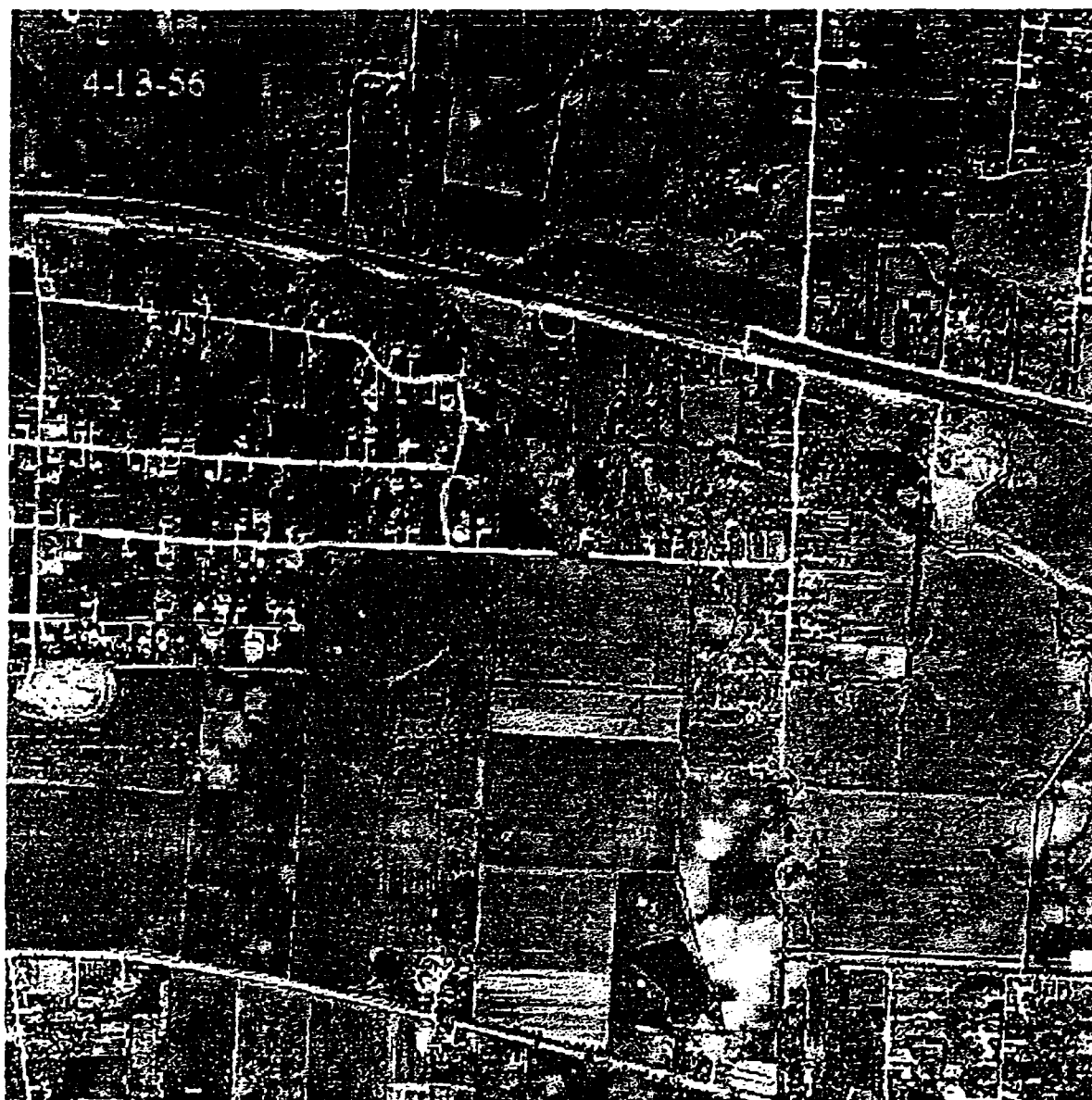
North-Residentially improved

South-Cropland

East-Cropland

West-Cropland

No evidence of prolonged excavation or construction activity on specific sites in the immediate area is documented by the historical aerial photographs.





Tax Records

EDI contacted the local tax assessor's office to ascertain building construction dates and prior ownership history from available tax records. This information will verify building activity dates as interpreted from other sources and may document the type of business conducted on the site prior to current ownership.

| | |
|------------------------------------|---|
| <i>Township:</i> | Lisle |
| <i>Construction Date:</i> | Permitted June 20, 1979. Re-assessed as commercially improved July 27, 1979 |
| <i>Taxpayer of Record:</i> | Dynagear |
| <i>Prior Ownership (recorded):</i> | Not identified |
| <i>Prior Use:</i> | Vacant & unimproved |
| <i>Building Detail:</i> | Steel and masonry construction; poured concrete foundation; sprinklers |
| <i>Other:</i> | None |

[illegible]

BUILDING DESCRIPTION AND VALUATION

PARCEL NO.

Card of Card

CODE

| LEGAL DESCRIPTION | SEC. | TOWN | RANGE | LOT | SUB LOT | BLOCK |
|-------------------|------|------|-------|-----|------------|-------|
| | | | | | | |

Effective Age

BUILDING SKETCH

BUILDING VALUE CALCULATION

| TYPE AND USE | |
|------------------------|------------|
| Combination Store And: | Left |
| Department | Office |
| Multi-Family Apartment | |
| Hotel | Store |
| Warehouse | Bank |
| Restaurant | Garage |
| Gas Station | Industry |
| Greenhouse | Greenhouse |
| Hospital or Sanitorium | |

| Observed Physical Condition | | | |
|-----------------------------------|------------------|------|------|
| Good | Normal | Fair | Poor |
| (3) ROOF AND ROOFING | | | |
| Roof Construction: | | | |
| Wood _____ | Steel Deck _____ | | |
| Reinforced Concrete _____ | | | |
| Roofing: | | | |
| Prepared Roll _____ | | | |
| Wood or Composition Shingle _____ | | | |
| Built-up Asph It or T and G _____ | | | |
| Corrugated Metal _____ | | | |

| Effective Age | |
|-------------------------|--------------|
| Date | Years |
| (6) PLUMBING | |
| Utility Connections: | |
| Water: | Sewer |
| Number Bathrooms (3 Fa) | |
| Number Toilets (2 Fa) | 7 |
| Number Single Fixtures | 14 |
| (7) ELECTRIC WIRING | |
| Conduit | Power Wiring |
| (8) HEATING | |

A large sheet of graph paper with a grid pattern. In the bottom right corner, there is a small oval containing handwritten text.

83
MCH
1960

| Item Number | Area or Quantity | Unit Cost | Total |
|-------------|------------------|-----------|-------|
| Base | | 1160 | |
| | | 78% | |
| | 21960 | 904 | = 198 |

| ADDITIONS AND SUBTRACTIONS | | | |
|----------------------------|----------|------|--|
| Pump | 10 P200. | 3800 | |
| | 4 300 - | 1200 | |
| SPC | 21960 | .55 | |
| | 2147 | .20 | |
| ADDITIONS | 4800 | 2.00 | |
| EXP | | | |
| EXP | 2147 | 5600 | |
| YHC | | | |

| STRUCTURAL FRAME | | | |
|------------------|------|-------|------|
| | Wood | Steel | Conc |
| umms | | Y | |
| n Beams | | Y | |
| sts | | | |
| ssoc | | | |
| ders | | | |
| ght in Stories | | | |
| FOUNDATION | | | |
| onry Walls | | | |
| d or Black Piers | | | |

| | | |
|----------------------------|-----|-----------|
| Other _____ | | 1 |
| (4) FLOORS | | |
| Floor Construction: | | |
| Wood _____ | | |
| Concrete on Grade _____ | | |
| Reinforced Concrete _____ | | |
| Finish Flooring: | 1st | 2nd Above |
| Softwood % _____ | | |
| Hardwood % _____ | | |
| Terrazo % _____ | | |
| Other % _____ | | |
| (5) INTERIOR FINISH | | |

| | | |
|---------------------------------|---------------------|------------|
| No Heat | Stove | |
| Hot Air | Pipeless | |
| | Piped Gravity | |
| | Forced Circulations | |
| Steam | | |
| Hot Water | Fan Units | |
| No Boiler | | |
| (9) BASEMENT | | |
| None | Full | Height |
| Partial Basement % Ground Area | | |
| Finished Basement % Ground Area | | |
| Floor: | Dirt | Wood Conc. |

| EXTERIOR WALLS | | | |
|---------------------|-------|------|------|
| | Front | Side | Rear |
| Common Face | | | |
| Concrete Block | | | |
| Reinforced Concrete | | | |
| Corrugated Metal | | | |
| Other | | | |
| Per Lin Ft | | | |
| at 1 ft Int | | | |

| | | | |
|-----------------|----------|--------|-------------|
| Wall Finish: | Wood | | |
| Plaster | | | |
| Other | | | |
| Developed Area: | Sq. Ft. | Units | Total Rooms |
| Apartment | 243 | | |
| Office | 896 | | |
| Other | 1008 | | |
| Partitions: | Liq. Ft. | Height | |
| Wood Stud | 2167 | | |
| Masonry | | | |
| Plaster | Side | | |
| Firewalls | | | |

| | | | |
|---------------------------------|--|----------------|--|
| (10) AIR CONDITIONING | | | |
| Washed _____ Refrigerated _____ | | | |
| Floor Area% _____ | | | |
| (11) FIRE PROTECTION | | | |
| Sprinkler (Floor Area) _____ | | | |
| Fire Hose Stations: _____ | | | |
| Number _____ | | Size _____ | |
| Fire Pumps: | | | |
| Number _____ | | Capacity _____ | |
| (12) BUILDING ELEVATORS | | | |
| Number _____ | | Cap. _____ | |
| Passenger _____ | | Floors _____ | |

| BUILDING AREA CALCULATION | | | | | |
|---------------------------|-------|-------|---------------------------|-------------|------------|
| Floor or Part | Width | Depth | Ground Area (Square Feet) | Height | Cubic Feet |
| | 183 | 120 | 21960 ft ² | 20' | |
| | | | | | |
| | | | | | |
| | | | | | |
| Total Area | | | | Total Cubic | |

Handwritten calculations:
 21960 x 20 = 439200
 439200 / 10 = 43920

| | | |
|----------------------------|---|-----|
| LOADING 1530.240 | = | 238 |
| Total Replacement Cost | | |
| Cost Conversion Factor | | |
| Converted Replacement Cost | | 119 |

DEPRECIATION AND OBsolescence
DEPRECIATION

a. Effective Age Depreciation 2
b. Observed Physical Condition
c. Total Depreciation to be taken
d. Net Condition 100%

OBSCOLESCENCE

a. Overimprovement _____

b. Underimprovement _____

c. Other VAV 5

d. Net Condition 100

e. Final No. 93

3) _____ OTF _____
 el or Theater Marquee: Area _____
 Copy: Type _____ Area _____
 Inst: Type _____ Area _____
 Deck: Type _____ Area _____

Grossing Pit or Hoist _____ 183
 Other _____ 120
 303

Freight _____

WALL RATIO CALCULATION

Ground Area _____

Perimeter 6000 ft

Wall Ratio _____

| CONTRIBUTIONS TO PRINCIPAL BUILDING | | |
|-------------------------------------|----------------|--------|
| Age | Extent or Cost | Source |
| | | |
| | | |
| | | |

| DATE OF CONSTRUCTION | |
|----------------------|--------|
| Age | Source |
| JUN 79 | #55 40 |

| | Date | Age | Extent of |
|-------|------|-----|-----------|
| 1,500 | 1885 | | |
| | | | |
| | | | |
| | | | |
| | | | |

| MAJOR ALTERATIONS AND ADDITIONS | | |
|---------------------------------|--------|------|
| Cost | Source | Date |
| | | |
| | | |
| | | |

| CONTRIBUTIONS TO PRINCIPAL BUILDING | | |
|-------------------------------------|----------------|--------|
| Age | Extent or Cost | Source |
| | | |
| | | |
| | | |

| SUMMARY OF APPRAISED VALUE | |
|-------------------------------------|-------|
| Principal Building Appraisal | 110, |
| Other Principal Buildings Appraisal | |
| Accessory Buildings Appraisal | 837 |
| Total Building Appraisal | 94630 |
| Total Land Appraisal | |
| Total Appraised Value | 30 |

| ACCESSORY BUILDINGS | | | | | | | | | | | | | | | | |
|---------------------|------------|-------|--------|------------|---------------|------|-------|------|-----|-----------|--------------------------|-----------|-------------|------------------|-----------|----------------|
| No | Dimensions | | | Ext. Walls | Missing Walls | Roof | Floor | Area | Age | Unit Cost | Additions and Deductions | Base Cost | Conv. Fact. | Replacement Cost | Net Cond. | Net Appraisal |
| | Width | Depth | Height | | | | | | | | | | | | | |
| | | | | | | | | | | | Blacktop . 44x130 = | 5720 | | | | |
| | | | | | | | | | | | 237x43 = | 10190 | | | | |
| | | | | | | | | | | | | 15910 | # | | | (30x50% x 547) |

Building Department Records

EDI reviewed records maintained by the local building department, issued to the subject address. This review will confirm or identify building construction, demolition and/or renovation activities conducted on site by the current or former owners.

Building Permits: Downers Grove

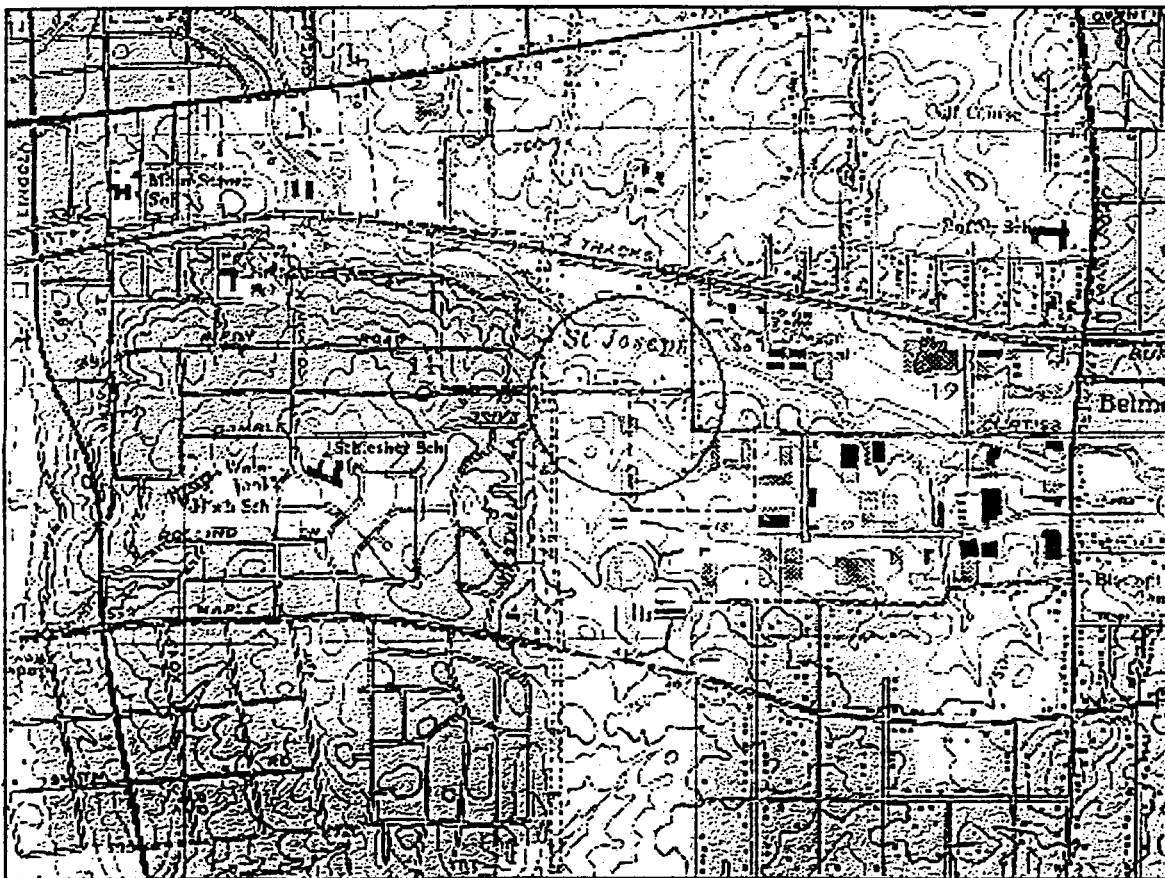
| <u>Number</u> | <u>Purpose</u> | <u>Date</u> | <u>Owner or Agent</u> |
|---------------|--|-------------|----------------------------------|
| 55 | Construction of commercial office/warehouse building | 6-20-79 | Favar Builders, Inc. |
| 55 | Electrical | 10-17-79 | Dynagear (Favar Construction) |
| 55 | Occupancy | 12-12-79 | Dynagear (Favar Construction) |

Other: No other construction or demolition activity recorded.

VII. SURFACE MAPPING

Topography

- Elevation:* 719 feet above sea level
- Low Point:* The base of the exterior loading docks; west property line.
- Surface Downgrade:* The building grade is approximately one foot below the elevation of Thatcher Road. Approximately 1% from the east building perimeter to the west property line.
- Stormwater Runoff:* Towards the identified low points, accelerated by topography and the paved surface.
- Property Grade:* Level with adjoining sites to the north and east. Approximately three feet below the grade of the southerly adjacent building. Level with the east boundary of the Illinois tollway easement.



USGS 1962/PHOTOREVISED 1972 AND 1980

VIII. GEOLOGY/HYDROGEOLOGY

Potential for Contamination of Shallow Aquifers

The potential for contaminating groundwater resources is a critical concern in Illinois. Contamination may result from land burial of municipal wastes and surface or near-surface disposal of wastes (septic systems; surface-spread sludge; agricultural pesticides, herbicides, and fertilizers; and accidental spills of chemicals or other contaminants).^{*} When chemical or biological agents from wastes enter surface water or groundwater, they present potential health hazards.

Earth materials that yield groundwater to wells are aquifers: porous, coarse-grained sand and gravel deposits in glacial drift, and porous or fractured bedrock. Aquifers are susceptible to contamination because their hydrogeologic properties allow waste effluents to travel rapidly. Yet whether a shallow aquifer actually becomes contaminated also depends on the properties of the earth/geologic materials that surround it.

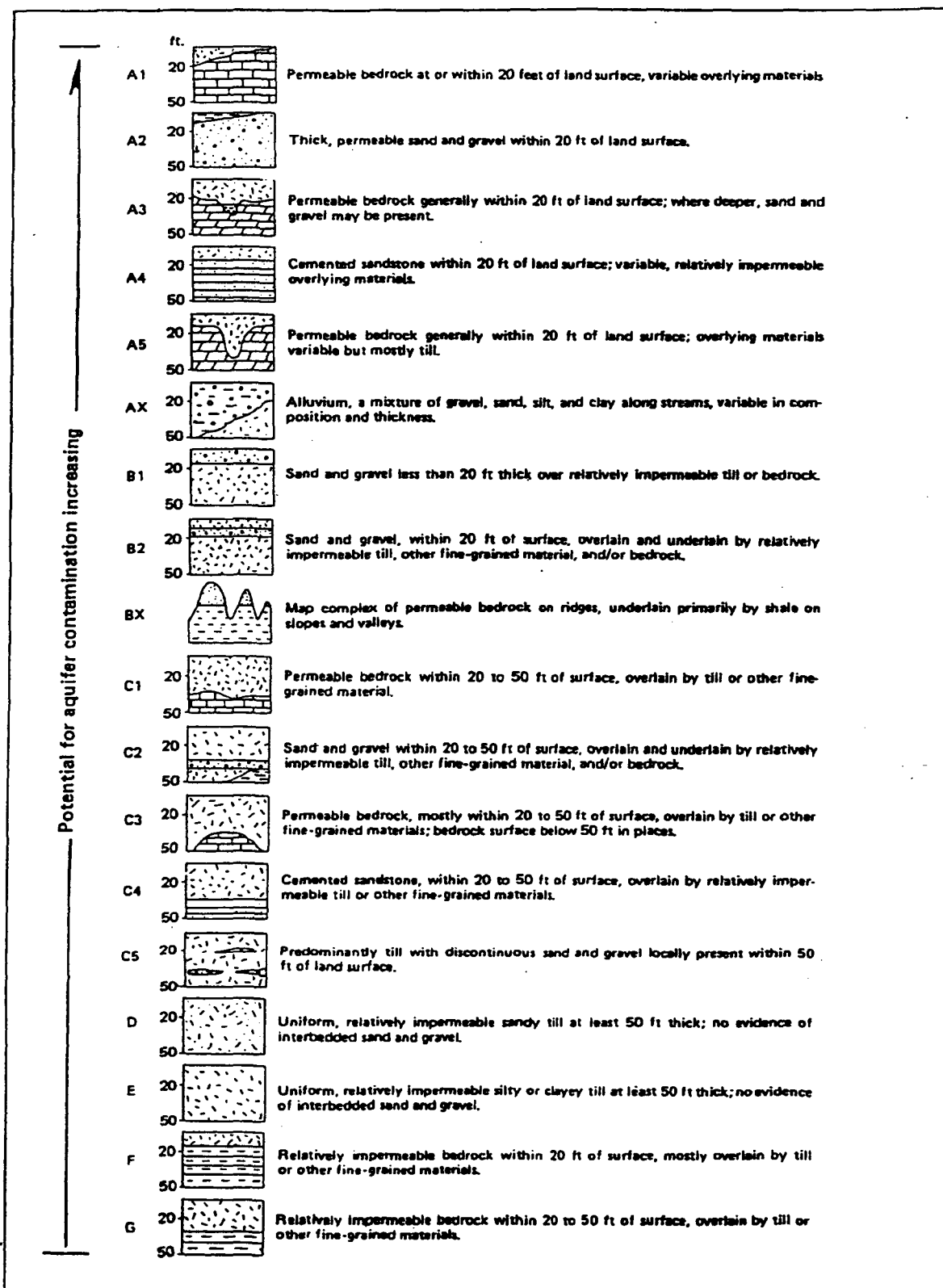
Thus, the combination of hydrogeologic properties and stratigraphic position of geologic materials provides the basis for mapping the potential for contaminating aquifers. By comparing sequences of geologic materials, we can rate the relative contamination potential for aquifers in any area of the state.

Two maps constructed for this study show the distribution of sequences of geologic materials and their comparative ratings. Each sequence was rated for the susceptibility of its water-yielding materials (aquifers) to contamination from waste-disposal practices. Ratings were made by comparing the capacities of earth materials to accept, transmit, restrict, or remove contaminants from waste effluents. The vertical sequences, not specific materials, were compared and rated.

* For hazardous (toxic and radioactive) waste disposal, geologic materials must be evaluated to greater depths. The maps presented with this report cannot be used to determine waste-disposal sites.

Land Burial of Wastes

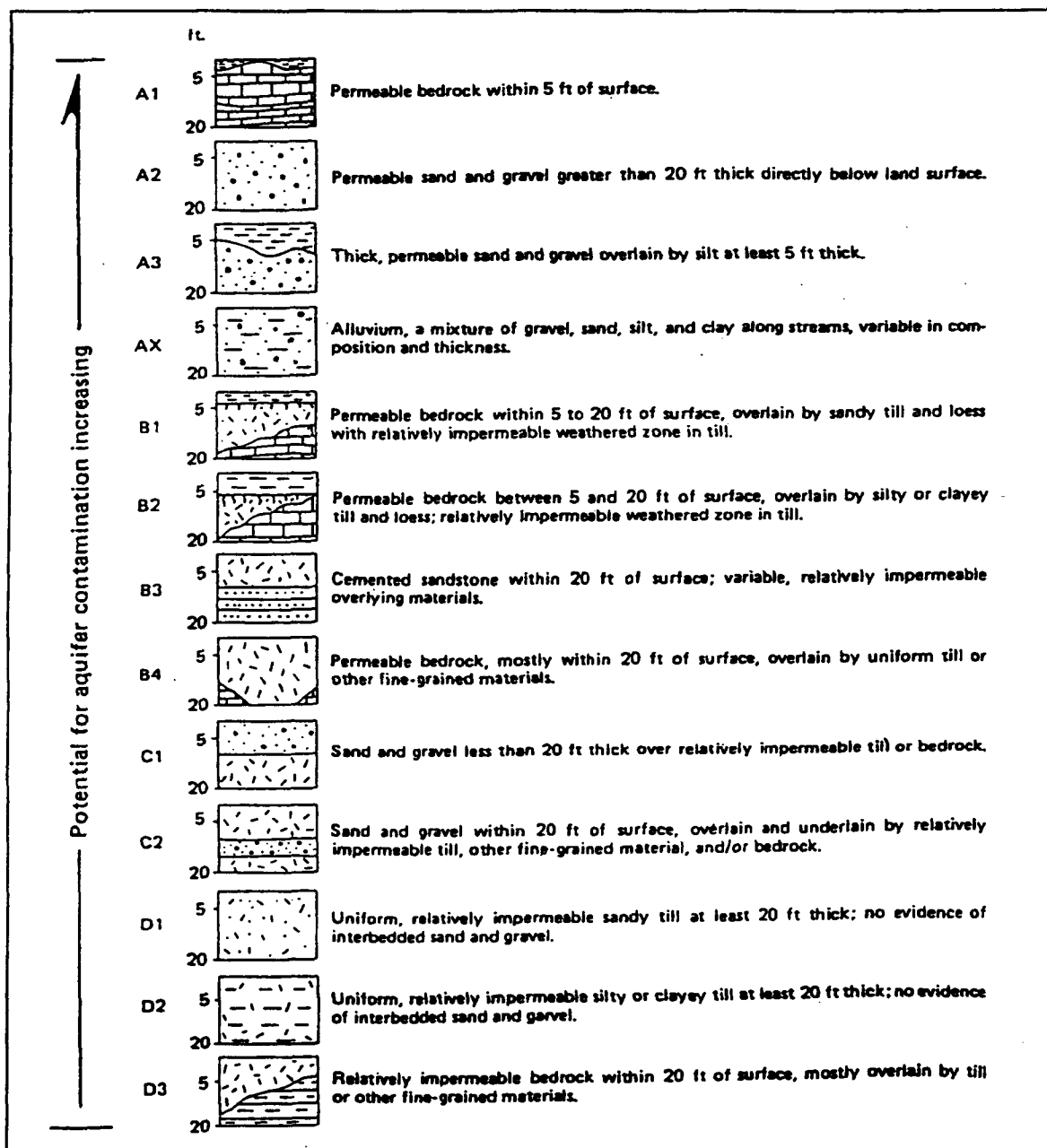
Potential for Contamination of Shallow Aquifers by Land Burial of Municipal Wastes, identifies 18 sets of sequences. Sand-and-gravel or permeable-bedrock aquifers lying within 50 feet of the surface are most susceptible to contamination. These sequences, which receive the highest contamination-potential ratings, occur principally in the driftless and thin-drift areas of northern, northwestern, western, and extreme southern Illinois. Sequences with the lowest contamination potential contain either uniform till or other fine-grained materials at least 50 feet thick, or uniform till less than 50 feet thick but overlying impermeable bedrock; these cover large areas of northeastern and central Illinois. The subject is rated as "C1," described as moderately susceptible to contamination from the land burial of wastes (see diagram immediately following).



Potential for Contamination of Shallow Aquifers from Land Burial of Municipal Wastes

Surface Spreading of Wastes

Potential for Contamination of Shallow Aquifers by Surface and Near-Surface Waste Disposal, identifies 13 sets of sequences. Sand-and-gravel or permeable-bedrock aquifers lying near the surface are most susceptible to contamination; these sequences, which receive the highest contamination-potential ratings, occur principally in north-central, northwestern, and extreme southern Illinois. Sequences with the lowest contamination potential have a minimum 20 feet of uniform till or other fine-grained materials at the surface; these occur primarily in northeastern and central Illinois. The subject is rated as "D2," described as relatively unsusceptible to contamination from the surface spreading of wastes.



Potential for Contamination of Shallow Aquifers from Surface or Near Surface Waste Disposal

Soil Survey

Geology compiled by the United States Department of Agriculture Soil Conservation Service between 1971-1975 indicates that the subject property consists of Ashkum silty clay loam.

Ashkum silty clay loam - This nearly level, poorly drained soil is along drainageways and in depressions between ridges on glacial plains. It is occasionally flooded for brief periods in spring. Areas of this soil are very irregular in shape and 2 to several hundred acres in size.

Typically, the surface layer is black silty clay loam and silty clay about 11 inches thick. the subsoil is about 36 inches thick. the upper part of the subsoil is very dark gray, mottled, firm silty clay; the middle part is gray, mottled, firm and very firm silty clay; and the lower part is mixed gray, yellowish brown, and dark yellowish brown, very firm silty clay loam. The underlying material to a depth of 60 inches is mixed gray and dark yellowish brown, very firm silty clay loam and has a few pebbles and stones. In some places where recent deposits of soil material are from the surrounding higher areas, the surface layer is more silty. In some areas the very firm underlying material is at a depth of more than 60 inches.

Included with this soil in mapping and making up 1 to 15 percent of the unit are small areas of Peotone and Varna soils. The Peotone soils are in the deeper depressions, and the moderately well drained and well drained Varna soils are on the higher ridges and knolls.

Most areas of this soil are artificially drained by tile and, to a lesser extent, by surface ditches or sewer systems. In undrained areas or in areas where drainage systems have been damaged by construction, a water table is at a depth of 1 foot or less during wet seasons.

Water and air movement through this soil is moderately slow, and surface runoff from cultivated areas is slow to ponded. Available water capacity is high. Reaction is neutral or mildly alkaline in the upper part of the subsoil and is mildly alkaline or moderately alkaline in the lower part. Reaction in the surface layer varies, depending on past management, but is commonly neutral. Organic matter content is high. The surface layer is compact and rather difficult to work. Because it is relatively high in clay content, it is sticky when wet and becomes hard and cloddy when dry. Root development is restricted below a depth of about 37 inches by the compact, moderately fine textured glacial deposits.

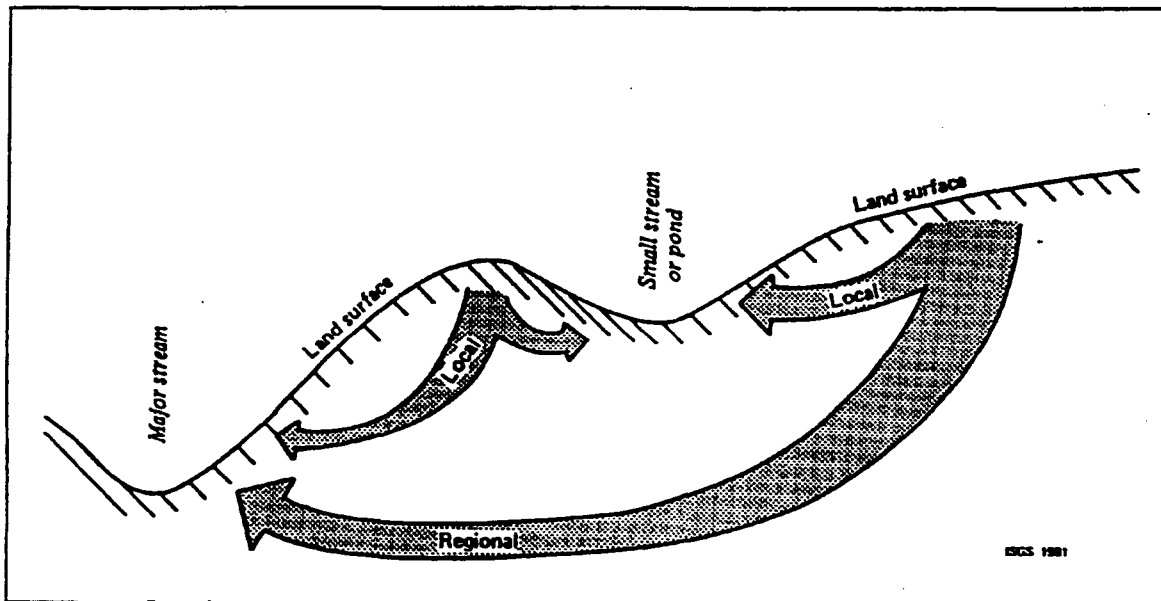
Some areas of this soil are intensively farmed. However, many areas near urban development are idle. The trend of land use is toward nonfarm uses. This soil has very good potential for crops and poor potential for most urban uses.

Areas of this soil used for urban development must be artificially drained and protected from flooding. Dwellings with basements should not be constructed because basements are likely to be wet. Dwellings without basements should be constructed only after drainage systems are installed and subgrade material is replaced. Excavating this soil is difficult because of wetness and relatively high clay content. Draining this soil and using suitable fill material improve strength and increase suitability for streets and roads. Septic tank absorption fields need seepage beds that are constructed above the water table in suitable fill material. Contamination of ground water and septic system failures are likely. Where possible, all sanitary facilities need to be connected to community sewers and treatment facilities. Sewage lagoons are suited to this soil.

Site Hydrology/Hydrogeology

Groundwater is obtained from four (4) aquifer systems in northeastern Illinois; glacial drift, shallow bedrock and two (2) divisions of deep bedrock. Municipal water supplies are generally provided by the shallow bedrock aquifer system. Depth to the Pleistocene glacial drift groundwater is unknown. Geology compiled by the Illinois State Geological Survey and the Illinois State Water Survey indicate that the top of the shallow bedrock aquifer system under the site is located approximately 650 feet above sea level, or 69 feet below grade.

Shallow bedrock aquifer groundwater direction is determined by three (3) factors: local flow, towards streams or retention areas; regional flow, towards lakes or rivers; and the proximity of municipal and/or industrial production wells. The groundwater flow in the area of the glacial deposits is unknown; however, groundwater is likely to flow in a southwesterly direction towards the East Branch of the DuPage River. Recharge to the glacial deposits occurs locally by infiltration and percolation. The shallow bedrock aquifer groundwater direction under the site is southwesterly, towards the East Branch of the DuPage River.



Regional and local groundwater flow patterns

ADDENDUM

ADDENDUM

PCB CONTAINING ELECTRICAL EQUIPMENT

Identification and Handling

Since 1978, the USEPA has regulated the manufacture, use, distribution, storage and disposal of polychlorinated biphenyls ("PCB's") in electrical equipment. Substances that are regulated by this rule include, but are not limited to, dielectric fluids, contaminated solvents, oils, waste oils, heat transfer fluids, hydraulic fluids, paints, sludges, slurries, dredge spoils, soils, materials contaminated as the results of a spill and other chemical substances contaminated during the manufacturing process.

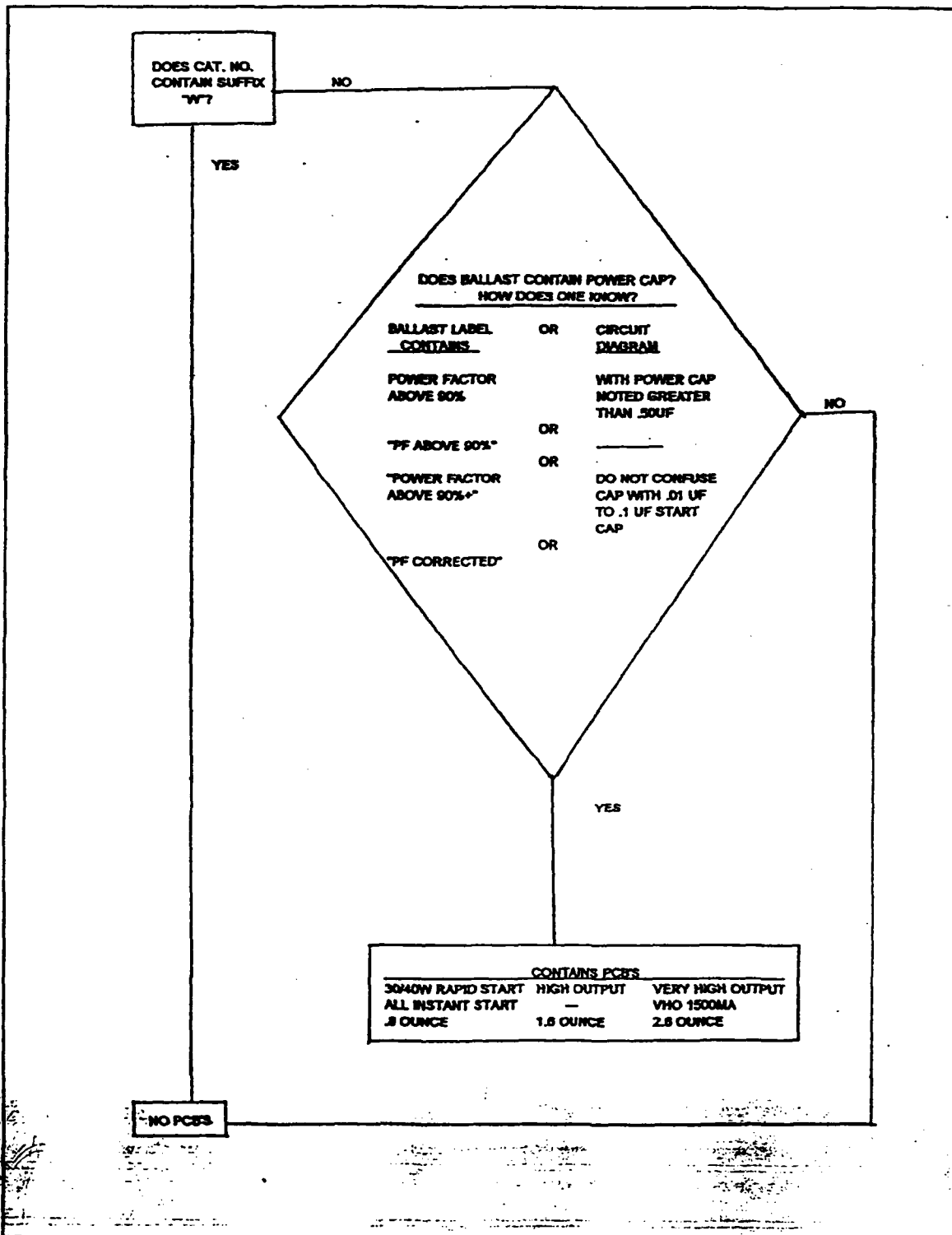
The regulations also define certain types of equipment and articles. A PCB Transformer is defined as a transformer containing 500 or more ppm. PCB Contaminated electrical equipment is defined as any electrical equipment containing 50ppm. or greater PCB's, but less than 500ppm PCB's. If the concentration is unknown, the equipment is assumed to be only PCB Contaminated electrical equipment rather than a PCB Transformer. PCB Equipment is defined as any manufactured item containing a PCB Article or other PCB Equipment, and includes microwave ovens, electronic equipment and fluorescent light ballasts and fixtures. Typically, fluorescent light ballasts manufactured prior to 1979 contain PCB dielectric fluid.

Under federal law, the clean-up requirements for a leaking light ballast are the same as that for "large equipment", or anything equal to or greater than nine (9) pounds total weight. Additionally, leaking PCB-containing ballasts may not be sent to a sanitary landfill. As changing these ballasts becomes necessary, it is recommended that they be replaced with non-PCB containing ballasts, and that caution be used in handling the old ballasts.

As of October 1, 1990, the use, in or near buildings, of network PCB Transformers with secondary voltages equal to or greater than 480 volts is prohibited under regulations of the USEPA. All radial PCB Transformers with secondary voltages below 480 volts in use in or near buildings must be equipped with electrical protection to avoid transformer failure caused by high current faults. Also as of October 1, all radial PCB Transformers with secondary voltages of 480 volts and above in use in or near buildings must be equipped with protection not only against failures caused by high current faults, but also against failures by sustained low current faults. Transformer owners are required by regulation to notify the property owner and local fire department of Transformer locations.

There are some important definitions in the regulations which must be noted. The first is that while the prohibition is only "in or near commercial buildings," that phrase is not a narrow one. It is defined to include residential properties, stores, office buildings, transportation centers, educational properties, institutional properties, and public assembly properties. They are buildings typically "accessible to both members of the general public and employees." Practically, the definition includes any non-industrial building. "In or near" includes the parking area serving a building or anything within 30 meters of a building.

If the PCB concentration is unknown, the equipment is assumed to be only PCB Contaminated electrical equipment rather than a PCB Transformer. This may provide an escape from regulation by encouraging ignorance. Transformer owners may choose not to do the relatively inexpensive test to determine the PCB concentration level. Possible consequences of ignorance include avoiding not only the ban, but also the regulations requiring notice by PCB Transformer owners to the fire department and building owners of transformer locations, since these regulations do not apply if the transformer is (or is assumed to be) only PCB Contaminated electrical equipment.



Addendum
PCB Containing Electrical Equipment

ADDENDUM

ASBESTOS CONTAINING MATERIALS

Definitions and Analysis Methods

Both the EPA and OSHA have published regulations to reduce asbestos exposure. EPA regulations focus on the application and removal of Asbestos Containing Materials ("ACM") in new or remodeled buildings, and the identification of friable asbestos in schools. EPA also regulates the industrial emission of asbestos fibers and the disposal of asbestos waste. OSHA addresses worker protection from asbestos emissions.

The first EPA regulations were issued in 1973 under the National Emission Standards for Hazardous Air Pollutants ("NESHAP") as authorized by the Clean Air Act ("CAA"). The first regulations were addressed largely at the asbestos industry, but also partially banned spray-applied ACM in new buildings, and established procedures for handling ACM during demolition. The regulations were revised in 1975 and 1978 to cover building renovations, the use of all types of ACM in new buildings and asbestos emissions from ACM waste disposal. Current federal regulations restrict the use of most asbestos products in new buildings and require the identification of asbestos in schools. The Asbestos Hazard Emergency Response Act ("AHERA") governs the test procedures, management, abatement and removal standards for ACM from schools.

Three (3) forms of asbestos are typically found in buildings; sprayed or trowled-on surfacing materials; insulation on pipes, boilers and ducts; and miscellaneous forms such as wallboard, ceiling tiles and floor tiles. Asbestos may also be found in cement products, acoustical plaster, fireproofing textiles and thermal insulation.

Of particular interest to owners of buildings with ACM are the following regulations:

When a building is demolished - or more than 260 linear ft. of asbestos pipe insulation or 160 sq. ft. of asbestos surfacing material are removed during renovation - advance notice must be filed with the EPA regional office and/or the state, giving:

- name and address of the building owner or manager;
- description and location of the building;
- scheduled starting and completion dates of ACM removal;
- description of the planned removal methods; and
- name, address, and location of disposal site.

ACM can be removed only with wet removal techniques. Dry removal is allowed only under special conditions and only with written EPA approval.

No visible emissions of dust are allowed during removal, transportation, and disposal of ACM.

Suspect building materials are commonly analyzed using polarized light microscopy ("PLM") with dispersion staining. The USEPA defines a material as asbestos containing if it has asbestiform fibers greater than 1% by weight. "Friable" asbestos is, by definition, any material that contains greater than 1% asbestos, and which can be pulverized, or reduced to powder, by hand pressure. This may also include non-friable material which becomes broken or damaged by mechanical force, and can, therefore, be reduced to powder by hand pressure.

Currently no federal or Illinois state regulations require the removal of ACM from non-school buildings. However, according to the National Emission Standards for Hazardous Air Pollutants ("NESHAP"), private property owners are required to prevent the visible emissions of asbestos fibers during renovation or construction activity. Renovation means altering a facility or one or more facility components in any way, including the stripping or removal of ACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions. Demolition is also defined to include the intentional burning of any facility. Friable ACM must be removed prior to the demolition.

The USEPA has categorized non-friable ACM as Category I and Category II. Category I non-friable ACM is defined as asbestos containing packings, gaskets, resilient floor coverings and asphalt roofing products. Category II non-friable ACM is defined as any material, excluding Category I non-friable ACM, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

ACM is not subject to NESHAP if it is Category I non-friable ACM that is not in poor condition, is not friable and will not be subjected to sanding, grinding, cutting or abrading. "In poor condition" has been defined to mean that the binding of the material is losing its integrity as indicated by peeling, cracking or crumbling. Category II non-friable ACM need not be removed prior to demolition if the probability is low that the material will become crumbled, pulverized or reduced to powder during demolition. Category I and II products which are simply broken are not subject to NESHAP.

DOWNERS GROVE SANITARY DISTRICT

Industrial Monitoring Data Summary

Report Date: 4/27/01
Analysis Date: 4/26/01

Monitoring Location: BALES MOLD SERVICE
2824 Hitchcock, Downers Grove

Sample Number: Total Flow
Sample Date: 15558
Sample Type: 4/9/01
Composite

Pollutant:

| | |
|----------------------------|-------|
| Antimony (T) mg/L | |
| Arsenic (T) mg/L | |
| Barium (T) mg/L | |
| Beryllium (T) mg/L | |
| Boron (T) mg/L | |
| Cadmium (T) mg/L | <0.02 |
| Chromium (T) mg/L | <0.05 |
| Chromium (+6) mg/L | |
| Copper (T) mg/L | <0.05 |
| Iron (T) mg/L | |
| Lead (T) mg/L | <.10 |
| Manganese (T) mg/L | |
| Mercury (T) mg/L | |
| Molybdenum (T) mg/L | |
| Nickel (T) mg/L | 0.36 |
| Selenium (T) mg/L | |
| Silver (T) mg/L | <0.05 |
| Thallium (T) mg/L | |
| Zinc (T) mg/L | 0.05 |
| pH-grab on 4/10/01 at 1000 | 7.95 |

| | | | | |
|--------------------|---------|-------|-------|-------|
| Total Cyanide mg/L | 4/11/01 | 10:00 | 15561 | <0.01 |
|--------------------|---------|-------|-------|-------|

Analyses are in accordance with 40 CFR Part 136

Exhibit K

DOWNERS GROVE SANITARY DISTRICT

Industrial Monitoring Data Summary

Report Date: 10/11/01
Analysis Date: 10/9/01

Monitoring Location: BALES MOLD SERVICE
2824 Hitchcock, Downers Grove
Total Flow
Sample Number: 15815
Sample Date: 9/11/01
Sample Type: Composite

Pollutant:

| | |
|----------------------------|--------------------------|
| Antimony (T) mg/L | |
| Arsenic (T) mg/L | |
| Barium (T) mg/L | |
| Beryllium (T) mg/L | |
| Boron (T) mg/L | |
| Cadmium (T) mg/L | <0.02 |
| Chromium (T) mg/L | 0.05 |
| Chromium (+6) mg/L | |
| Copper (T) mg/L | <0.05 |
| Iron (T) mg/L | |
| Lead (T) mg/L | <.10 |
| Manganese (T) mg/L | |
| Mercury (T) mg/L | |
| Molybdenum (T) mg/L | |
| Nickel (T) mg/L | 0.24 |
| Selenium (T) mg/L | |
| Silver (T) mg/L | <0.05 |
| Thallium (T) mg/L | |
| Zinc (T) mg/L | 0.08 |
| pH grab on 9/14/01 at 9:20 | 8.31 |
| Total Cyanide mg/L | 9/12/01 9:15 15811 <0.01 |



Enviro-Test/Perry Laboratories, Inc.

Chicago Dairy & Food Laboratories

7780 Quincy St. • Willowbrook IL 60521 • 630-734-9530 • fax 630-734-9534

Bales Mold Service, Inc.

2824 Hitchcock

Downers Grove, IL 60515

Certificate of Laboratory Analysis

Illinois Department of Public Health Certified # 17134

Report Number: T6573

Project:

Purchase Order:

Report Date 7/10/01

Date Received: 06/27/2001

Time Received: 12:30:00

Relinquished By: ETI

Received By: ML

Sample No. T6573001
Description: COMPOSITE

Matrix: A Sample Type: WW
Composite

Sampled: 06/26/2001 @ 09:55:00
Collected By: CLIENT

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|----------|---------|-------|-----------------|------------|---------|----------|-----------|
| Cadmium | < .02 | mg/l | 0.02 | 07/02/2001 | GL | SM 3111B | |
| Chromium | < .05 | mg/l | 0.05 | 07/02/2001 | GL | SM 3111B | |
| Copper | < .05 | mg/l | 0.05 | 07/05/2001 | GL | SM 3111B | |
| Lead | < .05 | mg/l | 0.05 | 07/05/2001 | GL | SM 3111B | |
| Mercury | < .0005 | mg/l | 0.0005 | 07/09/2001 | GL | SM 3112B | |
| Nickel | .12 | mg/l | .05 | 07/05/2001 | GL | SM 3111B | |
| Silver | < .05 | mg/l | 0.05 | 07/05/2001 | GL | SM 3111B | |
| Zinc | < .05 | mg/l | 0.05 | 07/05/2001 | GL | SM 3111B | |

Sample No. T6573002
Description: GRAB

Matrix: A Sample Type: WW
Grab

Sampled: 06/27/2001 @ 11:45:00
Collected By: CLIENT

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|-----------------|--------|-------|-----------------|------------|---------|------------|-----------|
| Cyanide (total) | < .01 | mg/l | 0.01 | 06/27/2001 | ML | SM 4500CnE | |

G. P. Lenos

G. P. Lenos, Laboratory Director

This Report May Not Be Duplicated
Except In Its Entirety

I certify that I am familiar with the information contained
in this report and that to the best of my knowledge and
belief such information is true, complete and accurate.



Enviro-Test/Perry Laboratories, Inc.

Chicago Dairy & Food Laboratories

7780 Quincy St. • Willowbrook IL 60521 • 630-734-9530 • fax 630-734-9534

Bales Mold Service, Inc.

Certificate of Laboratory Analysis

2824 Hitchcock

Illinois Department of Public Health Certified # 17134

Downers Grove, IL 60515

Report Number: T5102
Report Date 1/9/01

Project:

Date Received: 12/19/2000

Purchase Order:

Time Received: 12:40:00

Relinquished By: ETI

Received By: ML

Sample No. T5102001
Description: COMPOSITE

Matrix: A

Sample Type: WW
Composite
Sampled: 12/18/2000 @ 11:45:00

Collected By: JC

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|----------|---------|-------|-----------------|------------|---------|----------|-----------|
| Cadmium | .02 | mg/l | 0.02 | 01/09/2001 | GL | SM 3111B | |
| Chromium | < .05 | mg/l | 0.05 | 12/27/2000 | GL | SM 3111B | |
| Copper | < .05 | mg/l | 0.05 | 01/09/2001 | GL | SM 3111B | |
| Lead | < .05 | mg/l | 0.05 | 01/09/2001 | GL | SM 3111B | |
| Mercury | < .0005 | mg/l | 0.0005 | 01/09/2001 | GL | SM 3112B | |
| Nickel | < .05 | mg/l | .05 | 01/09/2001 | GL | SM 3111B | |
| Silver | < .05 | mg/l | 0.05 | 01/09/2001 | GL | SM 3111B | |
| Zinc | .06 | mg/l | 0.05 | 01/09/2001 | GL | SM 3111B | |

Sample No. T5102002
Description: GRAB

Matrix: A

Sample Type: WW
Grab
Sampled: 12/19/2000 @ 11:55:00

Collected By: JC

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|-----------------|--------|-------|-----------------|------------|---------|------------|-----------|
| Cyanide (total) | < .01 | mg/l | 0.01 | 12/20/2000 | ML | SM 4500CnE | |



Enviro-Test/Perry Laboratories, Inc.

Chicago Dairy & Food Laboratories

7780 Quincy St. • Willowbrook IL 60521 • 630-734-9530 • fax 630-734-9534

Bales Mold Service, Inc

2824 Hitchcock
Downers Grove, IL 60515

Certificate of Laboratory Analysis

Illinois Environmental Protection Agency Certified #100186
Illinois Department of Public Health Certified # 17134

Report Number: T1598

Project:
Purchase Order:
Notes:

Report Date: 12/28/99
Date Received: 12/18/1999
Time Received: 17:10:00
Relinquished By: ETI
Received By: ML

Sample No. T1598001
Description: GRAB

Matrix: A Sample Type: WW
Grab

Sampled: 12/17/1999 @ 16:00:00
Collected By: J. CLIEN

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|-----------------|--------|-------|-----------------|------------|---------|------------|-----------|
| Cyanide (total) | < .01 | mg/l | 0.01 | 12/20/1999 | BC | SM 4500CnE | |

Sample No. T1598002
Description: COMPOSITE

Matrix: A Sample Type: WW
Grab

Sampled: 12/17/1999 @ 16:00:00
Collected By: J. CLIEN

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|---------------------------|---------|-------|-----------------|------------|---------|----------|-----------|
| Cadmium | < .02 | mg/l | 0.02 | 12/20/1999 | BC | SM 3111B | |
| Chromium | < .05 | mg/l | 0.05 | 12/20/1999 | BC | SM 3111B | |
| Copper | .02 | mg/l | 0.02 | 12/20/1999 | BC | SM 3111B | |
| Lead | < .05 | mg/l | 0.05 | 12/20/1999 | BC | SM 3111B | |
| Mercury | < .0005 | mg/l | 0.0005 | 12/22/1999 | BC | SM 3112B | |
| Nickel | < .05 | mg/l | 0.05 | 12/20/1999 | BC | SM 3111B | |
| SAMPLER *** | * | | | 12/18/1999 | | | |
| Silver | < .05 | mg/l | 0.05 | 12/22/1999 | BC | SM 3111B | |
| SPL PREP: average HNO3 di | * | | | 12/20/1999 | BC | | |
| Zinc | < .05 | mg/l | 0.05 | 12/21/1999 | BC | SM 3111B | |

This Report May Not Be Duplicated
Except In Its Entirety

G. P. Leno, Laboratory Director

I certify that I am familiar with the information contained
in this report and that to the best of my knowledge and
belief such information is true, complete and accurate



Enviro-Test/Perry Laboratories, Inc.

Chicago Dairy & Food Laboratories

7780 Quincy St. • Willowbrook IL 60521 • 630-734-9530 • fax 630-734-9534

Sales Mold Service, Inc.

Certificate of Laboratory Analysis

2824 Hitchcock
Downers Grove, IL 60515

Illinois Environmental Protection Agency Certified #100188

Illinois Department of Public Health Certified # 17134

Report Number: T3467

Report Date 07/13/2000

Project:

Date Received: 06/28/2000

Purchase Order:

Time Received: 12:45:00

Notes:

Relinquished By: ETI

Received By: ML

Sample No. T3467001

Matrix: A

Sample Type: WW

Sampled: 06/28/2000 @ 11:30:00

Description: COMP 06/27-28/00

Composite

Collected By: JC

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|---------------------------|---------|-------|-----------------|------------|---------|----------|-----------|
| Cadmium | < .02 | mg/l | 0.1 | 07/05/2000 | BC | SM 3111B | |
| Chromium | < .05 | mg/l | 0.05 | 07/08/2000 | BC | SM 3111B | |
| Copper | .02 | mg/l | 0.1 | 07/05/2000 | BC | SM 3111B | |
| Lead | < .05 | mg/l | 0.2 | 07/05/2000 | BC | SM 3111B | |
| Mercury | < .0005 | mg/l | 0.003 | 07/13/2000 | BC | SM 3112B | |
| Nickel | .14 | mg/l | 1.3 | 07/05/2000 | BC | SM 3111B | |
| SAMPLER *** | * | | | | | | |
| Silver | < .05 | mg/l | 0.05 | 07/13/2000 | BC | SM 3111B | |
| SP. PREP: average HNO3 di | * | | | | | | |
| Zinc | < .05 | mg/l | 0.05 | 07/13/2000 | BC | SM 3111B | |

Sample No. T3467002

Matrix: A

Sample Type: WW

Sampled: 06/28/2000 @ 11:35:00

Description: GRAB 06/28/00

Grab

Collected By: JC

| Analyte | Result | Units | Detection Limit | Analyzed | Analyst | Method | Reference |
|-----------------|--------|-------|-----------------|------------|---------|------------|-----------|
| Cyanide (total) | < .01 | mg/l | 0.01 | 06/28/2000 | BC | SM 4500CnE | |


 G. P. Lenos, Laboratory Director

*This Report May Not Be Duplicated
Except In Its Entirety.*

I certify that I am familiar with the information contained
in this report and that to the best of my knowledge and
belief such information is true, complete and accurate



Enviro-Test/Perry Laboratories, Inc.
Chicago Dairy & Food Laboratories

7780 QUINCY STREET • WILLOW BROOK, IL 60521 • (630) 734-9530 • FAX (630) 734-9534

IEPA 100186

CERTIFIED LABORATORY REPORT

IDPH 17134

Bales Mold Service, Inc.

July 13, 1999

2824 Hitchcock

Received: 06-26-99

Downers Grove, IL 60515

Completed: 07-13-99

Lab No.

Sample Identification

S7915

Grab

06-25-99

S7916

24 Hour Composite

06/24-25/99

Test Parameter

S7915

S7916

Cyanide (total)

LT .01

Cadmium

LT .02

Chromium

.12

Copper

.05

Lead

.04

Mercury

LT .0005

Nickel

LT .05

Silver

LT .025

Zinc


.10

LT means Less Than

All results are total and in ppm(mg/l) unless otherwise noted; 1ppm = 1000ppb.

Approved for the examination of water, dairy, chemical, microbiological and container testing by the ILDPH and ILEPA.

certify that I am familiar with the information contained in this report
that to the best of my knowledge and belief such information
true, complete and accurate.


G.P. Lenos
Laboratory Director



Enviro-Test/Perry Laboratories, Inc.

Chicago Dairy & Food Laboratories

319 OGDEN AVENUE DOWNERS GROVE, IL 60515-3142 (630) 963-4672 FAX # (630) 963-4685

IEPA 100186

CERTIFIED LABORATORY REPORT

IDPH 17134

Bales Mold Service, Inc.

December 22, 1998

Received: 12-10-98

2824 Hitchcock

Completed: 12-21-98

Downers Grove, IL 60515

Lab No.

Sample Identification

| | | |
|-------|--------------------------|-------------|
| S4208 | 24 Hour Composite Sample | 12/09-10/98 |
| S4209 | Grab Sample | 12-10-98 |

Test Parameter

S4208

S4209

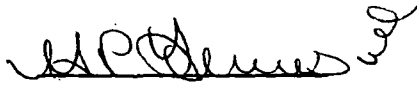
| | | |
|-----------------|----------|--------|
| Cadmium | LT .02 | |
| Chromium | LT .05 | |
| Copper | .06 | |
| Lead | LT .05 | |
| Mercury | LT .0005 | |
| Nickel | LT .05 | |
| Silver | LT .05 | |
| Zinc | LT .05 | |
| SAMPLER *** | * | |
| Cyanide (total) | | LT .01 |

LT means Less Than

*** An automatic sampling unit was installed to sample the effluent at the above location over a 24 hour period at 15 minute intervals. This composite sample was then assayed for the listed parameters.

All results are total and in ppm(mg/l) unless otherwise noted; 1ppm = 1000ppb. Approved for the examination of water, dairy, chemical, microbiological and container testing by the ILDPH and IEPA.

I certify that I am familiar with the information contained in this report and to the best of my knowledge and belief such information is complete and accurate.


G.P. Lenos
Laboratory Director

DOWNERS GROVE SANITARY DISTRICT

Industrial Monitoring Data Summary

Report Date: June 22, 1998
Analysis Date: June 18 & 19, 1998

Monitoring Location:

BALES MOLD SERVICE
2824 Hitchcock, Downers Grove

Sample Number:

Total Flow

14229

Sample Date:

4/8/98

Sample Type:

COMPOSITE

Pollutant:

| | |
|---------------------|-------|
| Antimony (T) mg/L | |
| Arsenic (T) mg/L | |
| Barium (T) mg/L | |
| Beryllium (T) mg/L | |
| Boron (T) mg/L | |
| Cadmium (T) mg/L | <0.02 |
| Chromium (T) mg/L | 0.13 |
| Chromium (+6) mg/L | |
| Copper (T) mg/L | 0.14 |
| Iron (T) mg/L | |
| Lead (T) mg/L | 0.16 |
| Manganese (T) mg/L | |
| Mercury (T) mg/L | |
| Molybdenum (T) mg/L | |
| Nickel (T) mg/L | 0.26 |
| Selenium (T) mg/L | |
| Silver (T) mg/L | <0.05 |
| Thallium (T) mg/L | |
| Zinc (T) mg/L | 0.23 |

| | | |
|---------------|--------------------|-------|
| Total Cyanide | 14222 4/8/98 (0930 | <0.01 |
|---------------|--------------------|-------|

Analyses are in accordance with 40 CFR Part 136

D. All discharges from this facility shall be in compliance with the ordinances of the District, the statutes of the State of Illinois, and the regulations of the U.S. Environmental Protection Agency, and the Illinois Environmental Protection Agency.

E. The discharge from this facility shall not produce any adverse effects on the District sanitary sewer service that would endanger private or public property, the public health, the integrity of the receiving stream, the District's collection system, and/or the treatment processes of the District Wastewater Treatment Center.

III. Self-Monitoring and Reporting Requirements

A. The Permittee shall sample and analyze wastewater at the specific locations, for the parameters, frequencies and sample types described herein:

| <u>Parameter</u> | <u>Location</u> | <u>Frequency</u> | <u>Sample Type</u> |
|--|-----------------|------------------|--|
| Copper (T) Chromium (T) Lead (T) Nickel (T) Zinc (T) | Manhole 001 | Semi-annual | 24 hour composite |
| Cyanide (T) | Manhole 001 | Semi-annual | 1 grab sample collected during the same 24 hour sampling period the sample for metals is collected |

(T) indicates Total value for the pollutant

and any additional parameters which are required to assure compliance with the limitations specified in Section II, Subparagraphs A through E.

All samples must be preserved at the time of collection, in accordance with 40 CFR Part 136 and shall be representative of the volume and nature of the discharge.

B. The District reserves the right to adjust the Permittees sampling frequency, sample types and parameters based on the submitted self monitoring data, District monitoring, inspections of the Permittees' facility and amendments to the District's Sewer User Ordinance.

C. At the request of the District, the Permittee shall provide splits on samples collected for self monitoring purposes.

D. The results of the self monitoring activities described in Section III(A) shall be reported to the District semiannually. These reports shall be submitted in accordance with the following schedule:

| <u>Monitoring Period</u> | <u>Report Due Date</u> |
|----------------------------|------------------------|
| January 1 through June 30 | July 20 |
| July 1 through December 31 | January 20 |

SCIENTIFIC CONTROL LABS
CompuFAX

May 26, 1998

Bales Mold Service, Inc.
2824 Hitchcock Ave.
Downers Grove IL 60515

Attention: Mr. Steve Bales

Lab No: 050355

Gentlemen:

The solution samples submitted to us on May 22, 1998 have been analyzed and are reported in ounces per gallon (unless otherwise noted) as follows:

| <u>CHROMIUM SOLUTIONS</u> | <u>Small</u> <u>165 GAL</u> | <u>Large</u> <u>800 GAL</u> |
|---------------------------|--------------------------------|--------------------------------|
| Chromic Acid | 36.98 | 32.99 |
| Sulfate | 0.38 16.42 | 0.34 48.02 |
| Ratio | 97:1 | 97:1 |
| Trivalent Chromium (%) | 1.0 | 1.0 |
| Iron (mg/L) | 2,610. | 1,290. |
| Copper (mg/L) | 273. | 185. |

Please contact us at once if you should have any questions.

Yours very truly,

AUDREY GLIVA

A.G.
FAX

ATT: Janet Buchner / HARD COPY will be delivered / 09-16-97

AX#

69-0827

**Enviro-Test/Perry Laboratories, Inc.**
Chicago Dairy & Food Laboratories

319 OGDEN AVENUE DOWNERS GROVE, IL 60515-3142 (630) 963-4672 FAX # (630) 963-4685

IEPA 100186

CERTIFIED LABORATORY REPORT

IDPH 17134

Bales Mold Service, Inc.

September 16, 1997

2824 Hitchcock

Received: 09-08-97

Downers Grove, IL 60515

Completed: 09-15-97

Lab No. Sample Identification

| | | |
|-------|--------------------------|-------------|
| R5173 | 24 Hour Composite Sample | 09-04/05-97 |
| R5174 | Grab Sample | 09-05-97 |


| Test Parameter | R5173 | R5174 |
|-----------------|----------|--------|
| Cadmium | LT .02 | |
| Chromium | LT .05 | |
| Copper | LT .02 | |
| Lead | LT .025 | |
| Mercury | LT .0005 | |
| Nickel | LT .05 | |
| Silver | LT .025 | |
| Zinc | LT .05 | |
| SAMPLER *** | * | |
| Cyanide (total) | | LT .01 |

LT means Less Than

*** An automatic sampling unit was installed to sample the effluent at the above location over a 24 hour period at 15 minute intervals. This composite sample was then assayed for the listed parameters.

All results are total and in ppm(mg/l) unless otherwise noted; 1ppm = 1000ppb. Approved for the examination of water, dairy, chemical, microbiological and container testing by the ILDPH and ILEPA.

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete and accurate.


G.P. Lenos
Laboratory Director



Enviro-Test/Perry Laboratories, Inc.
Chicago Dairy & Food Laboratories

319 OGDEN AVENUE DOWNERS GROVE, IL 60515-3142 (630) 963-4672 FAX # (630) 963-4685

IEPA 100186

CERTIFIED LABORATORY REPORT

IDPH 17134

Bales Mold Service, Inc.

July 14, 1997

2824 Hitchcock

Received: 07-07-97

Downers Grove, IL 60515

Completed: 07-14-97

Lab No.

Sample Identification

R3587

Grab Sample

07-07-97

Test Parameter

R3587

Nickel

LT .05

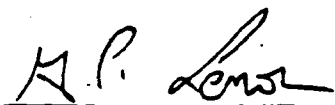
Chromium

.09

LT means Less Than

All results are total and in ppm(mg/l) unless otherwise noted; 1ppm = 1000ppb.
Approved for the examination of water, dairy, chemical, microbiological and
container testing by the ILDPH and IEPA.

I certify that I am familiar with the information contained in this report
and that to the best of my knowledge and belief such information
is true, complete and accurate.


G.P. Lenos
Laboratory Director

Clark

Michael C. Wiedel

DOWNERS GROVE SANITARY DISTRICT
Monitoring Data

Report Date: August 20, 1997
Analysis Date: August 19, 1997

Monitoring Location: BALES MOLD SERVICE
2824 Hitchcock, Downers Grove, IL
Inspection Manhole

Sample Number: 13959 13961
Sample Date: 7/01/97 7/02/97
Sample Type: ISCO COMPOSITE
Sample Time: N/A

Parameters

| | | |
|----------------|----------|----------|
| Antimony (T) | NA | NA |
| Arsenic (T) | NA | NA |
| Barium (T) | NA | NA |
| Beryllium (T) | NA | NA |
| Boron (T) | NA | NA |
| Cadmium (T) | 0.02 PPM | <.02 PPM |
| Chromium (T) | 1.80 PPM | 0.10 PPM |
| Copper (T) | 0.42 PPM | 0.19 PPM |
| Iron (T) | NA | NA |
| Lead (T) | 0.20 PPM | <.10 PPM |
| Manganese (T) | NA | NA |
| Mercury (T) | NA | NA |
| Molybdenum (T) | NA | NA |
| Nickel (T) | 28.0 PPM | 1.08 PPM |
| Selenium (T) | NA | NA |
| Silver (T) | <.05 PPM | <.05 PPM |
| Thallium (T) | NA | NA |
| Zinc (T) | 1.10 PPM | 0.21 PPM |

Total Cyanides-13957 Grab 7/01/97 at 1405 hours LT.01 mg/L

pH - grab on 7/01/97 1405 7.66

All analyses in accordance with 40 CFR Part 136.



Enviro-Test/Perry Laboratories, Inc.

Chicago Dairy & Food Laboratories

319 OGDEN AVENUE DOWNERS GROVE, IL 60515-3142 (630) 963-4672 FAX # (630) 963-4685

IEPA 100186

CERTIFIED LABORATORY REPORT

IDPH 17134

Bales Mold Service, Inc.

July 07, 1998

Received: 06-12-98

Completed: 07-02-98

2824 Hitchcock

Downers Grove, IL 60515

Lab No.

Sample Identification

| | | |
|-------|--------------------------|-------------|
| S0981 | 24 Hour Composite Sample | 06-10/11-98 |
| S0982 | Grab Sample | 06-11-98 |

Test Parameter

S0981

S0982


| | | |
|-----------------|----------|--------|
| Cadmium | LT .02 | |
| Chromium | LT .05 | |
| Copper | .04 | |
| Lead | LT .025 | |
| Mercury | LT .0005 | |
| Nickel | .91 | |
| Silver | LT .05 | |
| SAMPLER *** | ** | |
| Cyanide (total) | | LT .01 |

LT means Less Than

*** An automatic sampling unit was installed to sample the effluent at the above location over a 24 hour period at 15 minute intervals. This composite sample was then assayed for the listed parameters.

All results are total and in ppm(mg/l) unless otherwise noted; 1ppm = 1000ppb. Approved for the examination of water, dairy, chemical, microbiological and container testing by the ILDPH and ILEPA.

certify that I am familiar with the information contained in this report that to the best of my knowledge and belief such information true, complete and accurate.


G.P. Lenos
Laboratory Director

MIRKA



Enviro-Test/Perry Laboratories, Inc.
Chicago Dairy & Food Laboratories

319 OGDEN AVENUE DOWNERS GROVE, IL 60515-3142 (630) 963-4672 FAX # (630) 963-4685

IEPA 100186

CERTIFIED LABORATORY REPORT

IDPH 17134

Bales Mold Service, Inc.

September 16, 1997

2824 Hitchcock

Received: 09-08-97

Downers Grove, IL 60515

Completed: 09-15-97

Lab No.

Sample Identification

| | | |
|-------|--------------------------|-------------|
| R5173 | 24 Hour Composite Sample | 09-04/05-97 |
| R5174 | Grab Sample | 09-05-97 |

Test Parameter

R5173

R5174


| | | |
|-----------------|----------|--------|
| Cadmium | LT .02 | |
| Chromium | LT .05 | |
| Copper | LT .02 | |
| Lead | LT .025 | |
| Mercury | LT .0005 | |
| Nickel | LT .05 | |
| Silver | LT .025 | |
| Zinc | LT .05 | |
| SAMPLER *** | * | |
| Cyanide (total) | | LT .01 |

LT means Less Than

*** An automatic sampling unit was installed to sample the effluent at the above location over a 24 hour period at 15 minute intervals. This composite sample was then assayed for the listed parameters.

All results are total and in ppm(mg/l) unless otherwise noted; 1ppm = 1000ppb. Approved for the examination of water, dairy, chemical, microbiological and container testing by the ILDPH and IEPA.

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete and accurate.


G.P. Lenos
Laboratory Director

| Ln# | Invoice# | Inv Date | Loc | Slp | U/M | Ship Qty | Unit Price | Extended |
|------|----------|----------|-----|-----|-----|----------|------------|----------|
| >_1. | 38931 | 03/01/99 | 001 | 03 | DR | 1.000 | 521.4000 | 521.40 |

8505DR Trichloroethylene

| Ln# | Invoice# | Inv Date | Loc | Slp | U/M | Ship Qty | Unit Price | Extended |
|------|----------|----------|-----|-----|-----|----------|------------|----------|
| >_1. | 61021 | 05/15/01 | 001 | 03 | LB | 660.000 | 0.5800 | 382.80 |
| >_2. | 57849 | 01/12/01 | 001 | 03 | LB | 660.000 | 0.5800 | 382.80 |
| >_3. | 48634 | 02/14/00 | 001 | 03 | LB | 660.000 | 0.5800 | 382.80 |

8509DR Trichloroethylene

3 55 gallon Barrels

Enter-Zoom F1-PgDn F2-PgUp F4 Restart F8-Exit

E

Exhibit L

4E

00720000

E